A MORPHOLOGICAL ANALYZER FOR TAMIL

A thesis submitted to the University of Hyderabad

in partial fulfilment

of the requirements for the degree of

Doctor of Philosophy

in

APPLIED LINGUISTICS

Vaishnavi Ramaswamy

*Centre for Applied Linguistics **and** Translation Studies*
School of Humanities
University of Hyderabad
Hyderabad, INDIA.
September 2003

Centre for Applied Linguistics and Translation Studies
School of Humanities
University of Hyderabad
Hyderabad - 500046 (A.P) INDIA

Certificate

Dated: 12/09/2003

This is to certify that I, Vaishnavi Ramaswamy have carried out the research embodied in the present thesis entitled, "A MORPHOLOGICAL ANALYZER FOR TAMIL", for the full period prescribed under the Ph.D ordinances of the University.

I declare to the best of my knowledge that no part of this diesis was earlier submitted for the award of any degree, to any other institution or university.

R. Vaishnavi 12/09/2003

(Signature of the candidate)
Name: Vaishnavi Ramaswamy
Enrollment No. 2KHAPH01

(Signature of the Supervisor)
Dr. G. Uma Maheshwara Rao
READER
Centre for A. L. T. S.
University of Hyderabad
HYDERABAD-500046

Head of the Department:
Prof. Padmakar Dadegaonkar

HEAD
Centre for Applied Linguistics &
Translation Studies
University of Hyderabad
Hyderabad - 500 134

Probal 8-19-9-03

Dean of the School of Humanities:
Prof. Probal Dasgupta

DEAN
SCHOOL OF HUMANITIES
University of Hyderabad
Hyderabad-500 134

Acknowledgements

I would like to gratefully acknowledge Dr. G.Uma Maheshwara Rao, my supervisor, at the Centre for Applied Linguistics & Translation Studies, University of Hyderabad, for his help and support

Also I wish to thank for their support: Professor. Probal Dasgupta, Dean School of Humanities, Professor. Padmakar Dadegaonkar, Head of the Centre for Applied linguistics & Translation Studies, and Professor. Panchanan Mohanty, CALTS.

I thank the faculty of CALTS, and the office-staff, Mr. Murthy, Mr. Anand, Mr. Appa Rao and Mr. Mallesh, for their help.

I wish to thank Professor. Andrew Black, Linguistic Consultant (CARLA), Summer Institute of linguistics, for the Carla Studio Package and his vital help with AMPLE. I also thank Dr. Stephen McConnel, Language Software Development, Summer Institute of linguistics, for his guidance.

I thank the Central Institute of Indian Languages (CIIL), Mysore, for financially supporting this research.

I wish to thank Bharani ma'am and my parents for their encouragement and support

Abstract

This thesis deals with the designing and implementation of a morphological analyzer for the Tamil language. It also involves a comparative study of certain other models of morphological processing, in order to analyze the advantages of each, in terms of suitability for adaptation for a language like Tamil. This is primarily aimed at constructing a complete morphological module for Tamil that could be used in any NLP application like a spell checker, POS tagger, or parser.

Aspects of designing a computational model for morphological analysis include:

- Deciding a model based on psycholinguistic factors.
- Designing formal methods/ techniques that would enable converting theoretical descriptions into computational models.

The analyzer under consideration relies on a theoretical blend of the LA and IP approaches to morphological decomposition. Wherever automatic phonological rules operate largely, IP is incorporated. In areas where complex but non-automatic morphophonemics (*sandhi*) is involved, LA is the choice.

Qualitative and quantitative methods in corpus linguistics were employed to extract frequency counts and collocations of words. All possible contexts of occurrence and usage of a word were studied. For every grammatical category of the language, an extracted list of the minimum number of word-forms required for a sufficient coverage had been prepared. Based on such attributes, and in consideration of the factors of coverage and effiaency for a morphological analyzer, an essential set of morphological paradigms for each word class in Tamil had been established. This served as a database comprising of different tables of inflectional forms of a word, for all tie words in the language.

An analysis of two other well-established models of morphological analysis: AMPLE and KIMMO had also been taken up for the purpose of comparison. They formed good platforms for implementing morphological analyzers in various languages. Implementation of these have been compared with the Tamil Morph developed here, taking into consideration factors such as, the cost of implementation in terms of effort and time, coverage and efficiency.

Transliteration Table

Tamil	*Modified IPA*	The WX scheme	Kimmo	AMPLE
அ	a	a	a	a
ஆ	ā	A	A	A
இ	i	i	i	i
ஈ	ī	I	I	I
உ	u	u	u	u
ஊ	ū	U	U	U
எ	e	eV	e	e
ஏ	ē	e	E	E
ஐ	ai	E	Y	Y
ஒ	o	oV	o	o
ஓ	ō	o	O	O
ஔ	au	O	W	W
க	k	k	k	k
ச	c	c	c	c
ட	ṭ	t	t	t
த	t	w	w	w
ப	p	p	p	p
ற	r̲	rY	R	R
ஞ	ñ	F	F	F
ங	ṅ	f	f	f
ண	ṇ	N	N	N
ந	n̲	n	n	n
ம	m	m	m	m
ன	n̲	nY	M	M
ய	y	y	y	y
ர	r	r	r	r
ள	l̤	L	L	L
வ	v	v	v	v
ழ	ẓ	lYY	Z	Z
ல	l	l	l	l

Contents

Chapter 1. Introduction 1
1.1 Aims and Scope 1
1.2 Sources and Data 1
1.3 Morphological Theories 1
1.4 Framework for a Morphological Analyzer 2
1.5 Morphological Classes and Categories in Tamil 3
1.6 More Analyzers 4
Chapter 2.Tamil Morphology: An Introduction 5
2.1 Word Classes 5
2.2 Tamil Grammar 6
2.3 Morphological Classes and Categories in Tamil 6
2.3.1 Nouns 7
23.1.1 Number 7
23.1.2 Case 8
2.3.1.3 Gender 9
23.1.4 Other Attachments 10
23.1.5 The Nominal Paradigm 10
2.3.2 Pronouns 11
23.21 Number 11
23.22 Case 11
23.23 Gender, Number, Person 12
2.3.2.4 Other Attachments 12
23.25 The Pronominal Paradigm 12
23.3 Numerals 13
23.3.1 Number 13
2.3.3.2 Case and Ordinality 13
23.3.3 Gender, Number, Person 14
23.3.4 Other Attachments 15
2.3.3.5 The Numeral Paradigm 17
2.3.4 Verbs 17
23.4.1 Tense 17
23.4.1.1 Past 17
23.4.1.2 Present 19
23.4.23Future 21
2.3.4.2 Aspect 22
23.4.21 Infinitive 22
23.4.22 Participles 24
2.3.4.2.2.1 Adjectival 24
2.3.4.2.2.1.1 Past Adjectival Participle 24
2.3.4.2.2. \2 Present Adjectival Participle 25
2.3.4.2.2.2.3 Habitual Adjectival Participle 25
2.3.4.2.2.1.4 Negative Adjectival Participle 26
2.3.4.2.2.2 Verbal 27
23.4.2221 Positive Verbal Participle 27
2.3.4.2.2.2.2 Negative Verbal Participle 28

23.4.2.2.3 Conditional 28
2.3.4.2.2.3.1 Positive Conditional 29
2.3.4.2.2.3.2 Negative Conditional 30
2.3.4.2.2.3.3 Durative Conditional 30
2.3.4.3 Mood 31
2.3.4.31 Negative Past 31
23.4.3.2 Negative Future 32
23.4.3.3 Hortative 33
2.3.4.3.4 Admonitive 34
23.4.3.5 Prohibitive 35
23.4.3.6 Imperative 35
2.3.4.4 Other Attachments 36
23.4.5 The Verbal Paradigm 37
23.5 Adjectives 37
23.5.1 Gender, Number, Person 38
2.3.5.2 Other Attachments 38
23.5.3 The Adjectival Paradigm 39
Chapter 3. Modeling Morphology 40
3.1 Linguistic Theories 40
3.2 Psycholinguistic Theones 42
3.2.1 Storage And Retrieval Of Morphological Structure from The Mental Lexicon 42
3.22 Kinds Of Models 43
3.22.1 String-Scan Models 43-45
3.222 Category-Split Models 45-47
3.3 Implications of Psycholinguistic Findings 47
3.4 A Fitting Model for Computational Purposes 48
Chapter 4. Noun, Pronouns and Numerals 49
4.1 Nouns 49
4.1.1 Nominal Classes 49
4.1.2 Levels of Nominal Extensions 50
4.1.3 Analyzing Nouns 50
4.1.3.1 Clitics 50
4.1.3.2 Parades 51
4.1.3.3 Postpositions 51
4.1.3.4 Adverbials 53
4.1.3.5 Case 54
4.1.3.6 Number 54
4.1.4 Noun: Morphophonemics and Allomorphy 54
4.1.5 The Analyzer Chart for Nouns 57
4.2 Pronouns 60
4.2.1 Pronominal Classes 60
4.22 Levels of Pronominal Extensions 60
4.23 Analyzing Pronouns 61
4.24 Pronoun: Morphophonemics and Allomorphy 61
4.25 The Analyzer Chart for Pronouns 63
4.3 Numerals 66

4.3.1 Numeral Classes 66
4.3.2 Levels of Numeral Extensions 66
4.3.3 Analyzing Numerals 67
4.3.3.1 Particles, Postpositions and other suffixes 67
4.3.4 Numerals: Morphophonemics and Allomorphy 68
4.3.5 The Analyzer Chan for Numerals 71
Chapter 5. Verbs **74**
5.1 Verbs 74
5.1.1 Verbal Classes 74
5.1.2 Levels of Verbal Extensions 76
5.1.3 Analyzing Verbs 76
5.1.3.1 Clitics 76
5.1.3.2 Particles 77
5.1.3.3 Adverbials 78
5.1.3.4 Auxiliary Verbs 78
5.1.3.4.1 Auxiliary Verbs 1 79
5.1.3.4.2 Auxiliary Verbs2 80
5.1.4 Finite and Non-finite Verb forms 80
5.1.4.1 Finite Verb forms 80
5.1.4.1.1 Gender, Number and Person 80
5.1.4.1.2 Tense, Aspect, Modality 81
5.1.4.1.2.1 Past 81
5.1.4.1.2.2 Present 82
5.1.4.1.2.3 Future 82
5.1.4.1.2.4 Negative Past 83
5.1.4.1.2.5 Negative Future 83
5.1.4.1.2.6 Imperative 84
5.1.4.1.2.7 Prohibitive 84
5.1.4.1.2.8 Admonitive 84
5.1.4.1.2.9 Hortative 84
5.1.4.2 Non-finite Verb forms 84
5.1.4.2.1 Participles 85
5.1.4.2.1.1 Adjectival Participles 85
5.1.4.2.1.2 Verbal Participles 85
5.1.4.2.2 Conditionals 86
5.1.4.2.2.1 Positive Conditional 86
5.1.4.2.2.2 Negative Conditional 86
5.1.4.2.2.3 Durative Conditional 86
5.1.4.2.3 Infinitives 86
5.1.5 Verbs: Morphophonemics and Allomorphy 87
5.1.6 The Analyzer Chart for Verbs 90
Chapter 6. Adjectives **93**
6.1 Adjectives as a Category 93
6.1.1 Levels of Adjectival Extensions 95
6.1.2 Adjectival Classes 95
6.1.3 Analyzing Adjectives 95
6.1.3.1 Particles and GNP suffixes 95

6.1.4 Adjectives: Morphophonemics and Allomorphy ... %
6.1.5 The Analyzer Chart for Adjectives ... 97
Chapter 7. Computational Models 100
7.1 Computational Models ... 100
7.1.1 The HYBRID Model ... 101
7.1.1.1 Theory and Implementation ... 102
7.1.1.2 Formalism and Construct ... 102
7.1.1.3 Framework for the HYBRID Model ... 104
7.1.1.4 Allomorphy ... 104
7.1.1.4.1 Nouns ... 104
7.1.1.4.2 Pronouns ... 105
7.1.1.4.3 Numerals ... 106
7.1.1.4.4 Verbs ... 106
7.1.1.4.5 Adjectives ... 107
7.1.1.5 Implementing the HYBRID Model ... 107
7.1.1.6 Testing and Debugging ... 109
7.1.1.7 Output Samples ... 109
7.1.2 The AMPLE Analyzer ... 110
7.1.2.1 Theory and Implementation ... 111
7.1.2.2 Formalism and Construct ... 111
7.1.23 Framework for the AMPLE Model ... 112
7.1.2.4 Allomorphy ... 112
7.1.24.1 Nouns ... 112
7.1.2.4.2 Pronouns ... 113
7.1.2.4.3 Numerals ... 114
7.1.2.4.4 Verbs ... 114
7.1.24.5 Adjectives ... 115
7.1.25 Implementing the AMPLE Model ... 115
7.1.2.6 Testing and Debugging ... 120
7.1.27 Output Samples ... 120
7.1.3 The KIMMO Analyzer ... 121
7.1.3.1 Theory and Implementation ... 122
7.1.3.2 Formalism and Construct ... 122
7.1.3.3 Framework for the KIMMO Model ... 124
7.1.3.4 Allomorphy ... 125
7.1.3.4.1 Nouns ... 125
7.1.3.4.2 Pronouns ... 126
7.1.3.4.3 Numerals ... 126
7.1.3.4.4 Verbs ... 127
7.1.3.4.5 Adjectives ... 128
7.1.3.5 Implementing the KIMMO Model ... 128
7.1.3.6 Testing and Debugging ... 131
7.1.3.7 Output Samples ... 131
7.1.4 Other Morphological Analyzers ... 132
7.1.4.1 TagTamil ... 132
7.1.4.2 The 'API' Analyzer ... 132
7.1.4.3 The GS Morph ... 133

Chapter 8. Conclusions 136
8.1 Introduction 136
8.2 Modeling 136
8.3 Basic Mechanisms 136
8.4 Methodology 137
8.5 Computational Models: Implementation 137
8.5.1 The HYBRID Morph for Tamil 137
8.5.2 The AMPLE Implementation for Tamil 138
8.5.3 The KIMMO Implementation for Tamil 138
8.6 Computational Models: Comparison of Results 138
8.6.1 Parsing in the HYBRID Model 138
8.6.2 Parsing in the AMPLE Model 140
8.6.3 Parsing in the KIMMO Model 142
8.7 Observations 145
8.8 Discussion 146
8.9 Some Theoretical Issues 148
Bibliography **131-154**
Abbreviations 155
Appendices **156-325**
Appendix l(a) Algorithm for the Noun Analyzer in the Hybnd Model (PERL) 156-162
Appendix l(b) Algorithm for the Pronoun Analyzer in the Hybnd Model (PERL) 163-172
Appendix l(c) Algorithm for the Numeral Analyzer in the Hybnd Model (PERL) 173-180
Appendix 1(d) Algorithm for the Verb Analyzer in the Hybrid Model (PERL) 181-189
Appendix 1 (e) Algorithm for the Adjective Analyzer in the Hybrid Model (PERL) 190-192
Appendix 2 Database for the AMPLE Analyzer in Tamil 193-224
Appendix 3 Database for the KIMMO Analyzer in Tamil 225-241
Appendix 4(a) List of inflectional forms for the noun *'maram'*. 242-255
Appendix 4{b) List of inflectional forms for the pronoun *'nAnY.'*. 256-262
Appendix 4(c) List of inflectional forms for the numeral *'oVnYrYu'*. 263-269
Appendix 4(d) List of inflectional forms for the verb *'coVl'*. 270-318
Appendix 4(e) List of inflectional forms for the adjective *'puvu'*. 319-325

List of Figures

3.1 Morphological analysis in word recognition 46
4.1(a) Morphological Analyzer Chart: Noun 58
4.1(b) list of Nominal Inflections/Suffixes 59
4.2(a) Morphological Analyzer Chart: Pronoun 64
4.2(b) List of Pronominal Inflections/Suffixes 65
4.3(a) Morphological Analyzer Chart: Numeral 72
4.3(b) List of Numeral Inflections/Suffixes 73
5.1(a) Morphological Analyzer Chart: Verb 91
5.1(b) List of Verbal Inflections/Suffixes 92
6.1 (a) Morphological Analyzer Chart: Adjective 98
6.1(b) List of Adjectival Inflections/Suffixes 99
7.1 Karttunen's Implementation of KIMMO in LISP 123

List of Tables

2.1 Case Markers in Tamil 8
2.2 The Nominal Paradigm: Noun Classes 10
2.3 Pronominal Bases 11
Z4 The Pronominal Paradigm: Pronoun Classes 12
2.5 Numeral Bases - 1 13
2.6 GNP suffixes for Numerals 14
2.7 Numeral Bases - 2 14
2.8 Permissible Suffixes in Numerals 16
2.9 The Numeral Paradigm: Numeral Classes 17
2.10(a) Verb Stem Allomorphy in the Past Tense forms 18
Z10(b) Verb Suffix Allomorphy in the Past Tense forms 18-19
211(a) Verb Stem Allomorphy in the Present Tense forms 19-20
2.11(b) Verb Suffix Allomorphy in the Present Tense forms 20
2.12(a) Verb Stem Allomorphy in the Future Tense forms 21
2.12(b) Verb Suffix Allomorphy in the Future Tense forms 21-22
2.13(a) Verb Stem Allomorphy in the Infinitive forms 22-23
2.13(b) Verb Suffix Allomorphy in the Infinitive forms 23
2.14 The Verbal Paradigm: Verb Classes 37
2.15 GNP suffixes for Adjectives 38
2.16 The Adjectival Paradigm: Adjective Classes 39

4.1 Noun Classes 49
4.2 Chocs 50-51
4.3 Particles 51
4.4 Postpositions 52
4.5 Adverbials 53
4.6 Total allomorphs for Nouns 57
4.7 Pronoun Classes 60
4.8 Total allomorphs for Pronouns 62
4.9 Numeral Classes 66
4.10 Total allomorphs for Numerals 70

5.1 Verb Classes 75
5.2 Chocs 76-77
5.3 **Particles** 77
5.4 (a) Adverbials **1** 78
5.4 (b) **Adverbials** 2 78
5.5 **(a)** **Auxiliary** Verbs 1 79
5.5 (b) Auxiliary Verbs 2 80
5.6 GNP classes for Verbs 81
57 Total allomorphs for Verbs 89

6.1 Adjectival Classes....95
6.2 Adjectival Particles....95
6.3 Adjectival GNP Suffixes....96
6.4 Total allomorphs for Adjectives....%

7.1 Paradigm Types/Stem Variations for Nouns in the HYBRID Analyzer....104-105
7.2 Paradigm Types/Stem Variations for Pronouns in the HYBRID Analyzer....105
7.3 Paradigm Types/Stem Variations for Numerals in the HYBRID Analyzer....106
7.4 Paradigm Types/Stem Variations for Verbs in the HYBRID Analyzer....106-107
7.5 Paradigm Types/Stem Variations for Adjectives in the HYBRID Analyzer....107
7.6 Paradigm Types/Stem Variations for Nouns in the AMPLE Analyzer....112-113
7.7 Paradigm Types/Stem Variations for Pronouns in the AMPLE Analyzer....113-114
7.8 Paradigm Types/Stem Variations for Numerals in the AMPLE Analyzer....114
7.9 Paradigm Types/Stem Variations for Verbs in the AMPLE Analyzer....114-115
7.10 Paradigm Types/Stem Variations for Adjectives in the AMPLE Analyzer....115
7.11 Paradigm Types/Stem Variations for Nouns in the KIMMO Analyzer....125-126
7.12 Paradigm Types/Stem Variations for Pronouns in the KIMMO Analyzer....126
7.13 Paradigm Types/Stem Variations for Numerals in the KIMMO Analyzer....126-127
7.14 Paradigm Types/Stem Variations for Verbs in the KIMMO Analyzer....127
7.15 Paradigm Types/Stem Variations for Adjectives in the KIMMO Analyzer....128

8.1 Benchmarking the Analyzers....146

Chapter 1

Introduction

1.1 Aims And Scope

The research that is reported here involves the design and implementation of a morphological analyzer for modern standard Tamil that is used in formal writing and reading. The present thesis is an effort towards constructing a morphological analyzer. It also involves a comparative study of certain other models of morphological processing, in order to analyze the advantages of each, in terms of suitability for adaptation for a language like Tamil. This is primarily aimed at constructing a complete morphological module for Tamil that could be used in any NLP application like a spell checker, POS tagger, or parser.

As a component of various natural language processing systems involving Tamil, the morphological analyzer, requires to identify the given input - a word or a word form, and provide **the** output in terms of its compositionality - the word and its constituent morphemes consulting an inbuilt lexicon that provides specific grammatical feature of words. The *combinatorial* technique underlies the morphological processing of word forms.

1.2 Sources and Data

A corpus is considered as a rich reservoir of a language use in that it provides all its form and functions, and is considered as one of the important resources for any linguistic study. The Tamil corpus developed at CIIL, had been the source for the present study. A statistical study of the Tamil corpus was conducted to obtain information regarding various suffixes and their allomorphs.

In order to ensure sufficient coverage for the proposed morphological analyzer, frequency lists of word-forms in the corpus are examined. Inflectional and other relevant information is obtained from these by studying the reverse list of word forms.

This database has served as a footing for this scheme of morphological analysis.

1.3 Morphological Theories

The existing morphological theories are, by and large viewed as the **Combinatorial**, or the **Relational** kind. The former is far more common among linguists as against the latter. Within the combinatorial approach, there are three different models proposed for morphological analysis.

The *Item and Arrangement* model (Hockett 1958), assumes a concatenative approach wherein morphemes are lexical units, morphology, an agglutination of such units and words, seen as linear sequences of morphs. Describing the morphological patterning of a language would in consequence involve — a specification of the inventory of the morphemes (items), of the possible sequences in which these morphemes can occur (arrangement), and defining those morphs through which every morpheme of the language is realized (a morphological link). A word is analyzed as involving no process at all, but only a sequential ordering of morphemes, each of which finds a concrete realization through its allomorphs. The LA model is essentially morphemic, and non-processual

The *Item and Process* model (Hockett 1958), works on the conception that word forms constitute paired features of structure and function, or rather form and meaning, and that elements undergo a variety of modifications through processes to result in newer forms. Morphology is regarded as a set of derivational processes, acting on word forms, producing new word forms. However there exists in IP, only one recognized underlying basic allomorph that contextually varies.

The *Word and Paradigm* model of morphology (Robbins 1963), takes the 'word' operating within a paradigm of variables, as its basic unit. The WP model is distinct in that it focuses primarily on each word as a whole and on its overall effect to the unique set of properties that it expresses. The model evades complexities since it divides the word into to sequences of non-overlapping units: one for formal elements, and the other for functional and semantic properties. In the WP framework, it is a morphophonemic (MP) rule, a conglomerated set of morphosyntactic and morphosemantic operations that associate with a word, not a phonological (P) rule. There exist no absolute constraints that might limit the nature or number of correspondences between morphological properties and morphological processes.

Models like the *Item and Arrangement*, the *Item and Process*, and the *Word and Paradigm*, represent the combinatorial approach, wherein analysis invoK'es a necessary segmentation of a morphological string into a base and one or more affixes. Models like the *Word Network* (Singh and Ford 1984), characterize the relational approach, which implicates the concept that it is the 'word', and not the morpheme, which underpins morphological analysis and, an understanding of the complex relationship it shares with other words.

1.4 Framework For A Morphological Analyzer

The implementation of a morphological analyzer needs to provide for the analysis of a word in terms of its constituents and their corresponding feature values.

An analyzer fashioned in the IA framework of morphology, crucially maintains that 'all morphemes are lexical items', and enlists all morphemes of the language with the necessary feature specifications for each item on the list. Stems and affixes would be separately stored with information on relatable pairs of stems and affixes. Analysis of word-forms is then done through pattern matching, denoted by identity of features that build affixes onto the word stems to produce word-forms of increasing complexity.

If it is the IP model of morphology that the analyzer uses, according to the theoretical assumptions it makes, the abstract underlying morpheme finds its surface realization through different morphs in contextually determined morphophonemic states. Both roots and affixes are listed and pattern matching is done based on permitted allomorphic combinations.

Morphophonemic rules are incorporated, that account for these alternations, and which specify conditions of allomorphy.

The use of the WP model of morphology for the analysis of word-forms can be seen as more of a Relational approach, when compared to the IA or the IP. A listing of representatives of each paradigm is rather necessary, since derivatory processes operating within the cells of each paradigm exhibit idiosyncratic behaviour. Only roots, here, are recognized as lexical entries and all possible affixations on various roots or stems are made possible through the introduction of WFRs. Analysis of word-forms is triggered by rules working on these combinatorial links.

The Word and Network model that settles in for similar considerations can be regarded as a Full-listing model for morphological analysis. The essence of the Relational approach seems to be more favourable for the production and recognition of word-forms. Since 'affixes don't exist anywhere outside the words in which they appear', (Singh 2000, personal communication) adopting this theory for an analyzer presupposes a comparison of networks between forms rather than view it as a series of derivatory operations, as in the WP. No morphological stance is given to concepts like the 'root', or the 'affix', although for technical purposes one would need to observe these distinctions.

The scheme used here, for the purpose of morphological analysis is one based on the consideration of morphological classes as paradigm 'types'. (cf. McCarthy (1998). The notion of a paradigm' as used in this thesis conforms to what Carstairs (1987) as quoted in McCarthy (1998), defines as: "....a set of inflectional realizations appropriate to a given inflection class." Each cell in the paradigm reflects a distinct inflectional stem and the surface realization of the formative it subsumes.

What is required for a word form to be analyzed is a necessary database comprising of different tables of inflectional forms of a word, for all the words in the language. Every such table constitutes a set of roots or stems that represent the paradigmatic patterns they follow, implicit in that particular table, for the analysis of word-forms. All the words that fall under a particular table behave in a morphologically similar fashion, exhibiting those features peculiar to them, alone.

It is important to note here that the concept of morphological paradigms are in effect grounded within the theory of the models used, and a listing of the formatives in each of the paradigm types, further serve as a structured database for the implementation of the models.

The analyzer under consideration is based on an IA model for morphological decomposition. However, whenever the alternations are declared, the EP model is incorporated. Therefore the actual implementation involves a hybrid model.

1.5 Morphological Classes And Categories In Tamil

Based on certain morpho-syntactic factors that help identify morphological classes (and as have been discussed earlier), Nouns, Verbs, Adjectives, Adverbs, Pronouns and Numerals have been identified as the common morphological categories in Tamil.

---

[1] cf. McCarthy's (1998) use of the term 'paradigm'. Our use of the term conforms to Carstair's sense, and corresponds more to what McCarthy terms the 'inflectional class'

Nouns, pronouns and number words normally inflect for the categories of number, gender and case. Tamil permits 2 numbers (Singular and Plural), 3 grammatical genders (Masculine, Feminine and Neuter), and 8 cases (Nominative, Accusative, Dative, Sociative, Locative, Instrumental, Benefactive and Ablative).

Verbs chiefly inflect for tense, aspect and modality. Tamil records 3 tenses (Past, Present, Future), 5 aspects (Verbal Participles, Positive Conditional, Negative Conditional, Durative Conditional, Infinitive), 6 modals (Negative Past, Negative Future, Hortative, Admonitive, Prohibitive, Imperative).

In analyzing word-forms, establishing distinct word categories through identifying and classifying inflections and affixes peculiar to them would be the primary step of linguistic description. Depending on the stem variations resulting through the processes of affixation, paradigms within each word class had been established. Flow charts for each word class had been prepared in order to account for the nature and levels of affixation. Rules accounting for changes at the infra-word level behaviour were incorporated into programmes, for an analysis of morphophonemic precision.

Nouns, Verbs and Adjectives have been regarded as the three major word classes in Tamil. Pronouns and Numerals would be treated as distinct but minor word classes.

1.6 More Analyzers

Besides implementing a morphological analyzer based on a hybrid model in PERL, the work also focuses on a comparative analysis of two implementations of two other well-established platforms for morphological analysis: AMPLE and KIMMO. Tamil morphology needs to be restructured as a computational database, to set up working models of the latter. Morphological theory has to be rendered into distinct formalism in order that it suits the modus operandi of the two different word processors. Such an enterprise draws upon several aspects of theory and formalism.

An understanding of the formalisms is necessary for an insight into the theory that underlies its functioning. A perspective into the translation of theory into practice is essential for a proficient documentation of grammar into a well-defined morphological catalogue.

Implementation begins when morphological information is restructured in terms of formal methods and techniques that fit into the relevant models of word analysis. When, after a working model is ready, testing is a vital factor in the confirmation of correctly analyzed output. Over analysis has to be constrained so that morphologically well-formed words will be realized. This is achieved through debugging.

In order to achieve the above goal, the study requires a comparison of the means and methods involving different analyzers. The efficiency of an analyzer would be calculated in terms of linguistic and computational economy, the percentage of coverage, and the efficiency or accuracy of the resultant parse or analysis.

This is chiefly done with a view that through such an analysis, a comparison of the features of AMPLE and KIMMO could provide a better idea on the complexity of the analyzer under consideration.

Chapter 2

Tamil Morphology: An Introduction

2.1 Word Classes

It is a language's morphologically realized inflectional properties that help establish the morphological categories, and consequently, the word classes of the language. Morphologically determining these word categories would mean the identification of differences that cause certain affixes to attach only to a particular category, and certain other affixes to another. This entails an exhaustive enumeration of attested affixes ascribed specifically to a word-class based on the factors of morphological and syntactic distinctiveness. The common instances of various morphological categories found with the category of nouns are number, gender and case. Number can be described as ' a category of morphosyntactic properties used to distinguish the quantity to which a noun phrase refers' (Stump 1998). A majority of languages make use of the Singular and the Plural (a few like Sanskrit have the Dual number too). Gender is a category that is found to be not always grammatical. In Tamil where gender is morphologically expressed, the inflections mark the three distinct types: the Masculine, Feminine, and the Neuter. Case bundles up morphosyntactic features that express the distinctions in the relations, a noun phrase bears to its governing head, the verb. The far more commonly recognized cases are the Nominative, Accusative, and Dative. The remaining cases that express more of a semantic relation than a syntactic one are the Instrumental, Locative and the Ablative.

The inflectional properties that are expressed on verbs are those of Tense, Aspect, Modality, Voice, and Polarity. Tense identifies the temporal reference of an action denoted by a finite verb. The Past, Present, and sometimes the Future, mark the conceptually natural three-way distinction. Aspect helps to recognize the way a particular event locates itself in a particular time interval. Mood or Modality expresses the ways in which a proposition may relate to actuality (in the speaker's mind). Indicative, Optative, and the Imperative are the three basic kinds.

Voice describes the thematic relations that obtain between a verb, and its argument, which plays the syntactic role of subject. Active and Passive are the two commonly found types. Polarity can be defined as 'a category of morphosyntactic properties distinguishing affirmative sentences from negative sentences.' Though in some languages adjectives reflect nominal inflections as a result of governance by the head noun, the general inflectional features needed to identify adjectives are markers of degrees of comparison: namely, the Positive, Comparative, and the Superlative.

2.2 Tamil Grammar

Tamil morphology is primarily agglutinating, and suffixal. In other words, 'inflections are marked by suffixes attached to a lexical base, which may be augmented by derivational suffixes.' (Annamalai & Steever 1998). The traditional treatises on Tamil grammar define a distinction through free forms (the major grammatical classes), and bound forms (items like particles, and clitics). *Tolkaappiyam* recognizes Tamil as constituting two major word classes: nouns, termed *peVyarccoVl* (in Tamil) and verbs, termed *viNYEccoVl*. As per the classical grammatical treatises, and as recorded in Pope (1985), each of these is characterized by a narrow set of features, all of which are necessarily morphological. Pope's answer to the question of how nouns must be characterized and classified, morphologically substantiates this point: 'we must know four characteristics of nouns: 'class', 'division', person', and 'case'. 'Class is of two kinds, 'rational' and 'irrational'. As to the number of divisions of nouns, 'there are five: 'masculine', 'feminine', 'rational-plural', 'irrational-singular', and 'irrational-plural'. The three divisions of 'masculine', 'feminine', 'irrational-singular' are called the 'singular-number'. The two other divisions are called the 'plural-number'.' There are three 'persons' recognized: the first, second, and the third. Cases are eight: nominative, accusative, sociative, dative, ablative, instrumental and the locative.

2.3 Morphological Classes And Categories In Tamil

In Arden's (1891) study of Tamil morphology nouns are divided as rational vs. irrational, the rational corresponding to the animate, the irrational corresponding to the inanimate. Singular and Plural are the two numbers. In the organization of case, nine thematic relations are realized - the Nominative, Accusative, Instrumental, Social, Dative, Ablative (of motion), Genitive, Locative and the Vocative. The Benefactive is subsumed under the Dative. The Vocative, as a referential case has been included. Gender has also been seen as a grammatical feature of nouns.

Based on morphosyntactic properties of a word Lehmann (1989) introduces eight parts of speech in Tamil i.e., nouns, verbs, postpositions, adjectives, adverbs, quantifiers, determiners and conjunctions. Narrowing down to morphological features, there is a further line of reasoning on how lexical items can fall under a broad classification of nominal vs. verbal roots (that cover a large portion of roots in Tamil), and a minor classification of adjectival and adverbial roots (that subsume the rest). Apart from nouns and verbs, a separate set of uninflected words, called indeclinables, form an additional morphological class. Noun stems are seen as inflecting for the plural suffix, oblique, euphonic and the case suffix.

Annamalai & Steever (1998) largely discuss nominal and verbal morphology, and treat other classes as minor. According to this study of morphology, nouns inflect for gender, number and case. Gender here, is believed to be determined by the kind of locative case marker used, that determines the distinction between what they call *uyartinai* ('rational' corresponding to human), and *akrinai* ('non-rational' corresponding to non-human). The validation for this argument is that the marker *it am* is used in the case of the rational and *il*, in the case of non-rational. This being the case, the application of the marker *itam*, on nouns with the features +rational, +human should be an exclusive rule, which means it cannot apply to nouns that lack this feature. Consequently, the noun form *nAy-itam* should be an

invalid one, but which is not really the case. For that matter *nAy-il* is not a valid occurrence. Therefore rather, the terms *uyartinai* and *akrinai* could be redefined in their original sense[1]

In addition there is also recognition of two numbers and eight cases, including the unmarked singular, in number and the unmarked nominative, in case. An allusion to the vocative case has also been made. Pronouns have been semantically categorized, based on number and person. Labeled as singular or plural, pronouns are grouped under the 1", 2nd or the 3rdperson separately. This includes a list of twelve pronominal forms. Verbs again are semantically classified as either belonging to the 'strong' or the 'weak' class. Finite verbs are classified into the Past, Present, Future, Future Negative, Imperative, Negative Imperative and the Optative. Non-finite forms comprise a group of Verbal nouns, Infinitives, Conjunctives, Negative verbal forms, Conditionals, Negative Conditionals and Deverbal forms.

Other classes such as adjectives, adverbs, conjunctions, particles and postpositions seen as minor parts of speech in different grammars, are treated as cases of defective morphology, incapable of playing a part in the inflectional range of nouns or verbs. Therefore these are regarded as derivatives of nouns or verbs. The argument in favour of this is: "Yet, to say that a form is a defective noun or verb is still to say that it is a noun or verb."

For purposes of implementation, what is borne in mind is a morphological classification of inflectional classes in Tamil. Theoretically therefore, based on certain morpho-syntactic factors that help identify morphological classes (and as have been discussed earlier), Nouns, Verbs, Adjectives, Pronouns and Numerals have been identified as the common morphological classes in Tamil (Uma Maheshwara Rao, 1999, 2002). Nouns, Verbs and Adjectives are treated as three major classes, Pronouns and Numerals being regarded as distinct word classes, that could not supposedly be grouped as subclasses of Nouns.

2.3.1 NOUNS

Nouns normally inflect for the categories of number and case. Tamil permits two numbers the Singular and the Plural. In Tamil the thematic roles that these nouns play in relation ro the verb that they modify are indicated by a series of affixes commonly called as the Nominative, Accusative, Dative, Sociative, Genitive, Locative, Instrumental, Benefactive and the Ablative cases. Nominative is unmarked.

2.3.1.1 Number

The Singular number is unmarked in Tamil. The Plural is indicated by the suffix *kaL*, which is optional. Of the twenty-four classes of nouns, twenty-two have the suffixation of *kaL* for plural marking. Two other classes that end in long vowels have an allomorphic variant *kkaL* as their plural suffix. These are, classes / ('fly'), and *pU* ('flower'). Within the Item and Arrangement (IA) description, plural suffixes are listed as two separate entries *kaL* and *kkaL*, where the geminate suffix combines with stems that end in long vowels, and the non-geminate applies as the elsewhere condition. In the Item and Process (IP) model, *kaL* isheld as the basic plural morpheme from which the allomorph *kkaL* isderived in instances where the preceding stem ends in a long vowel.

[1] As in the sense of *Tolkappiyam*

From among the classes of nouns, there are the following four kinds, wherein the allomorphy is involved as part of pluralization. These are: *manYiwanY*, *maram*, *mulY* and *pul*.

1.	*manYiwanY*	*manYiwanY* → *manYiwar* + *kalY*
2.	*maram*	*maram* → *maraf* + *kalY*
3.	*mulY*	*mulY* → *mut* + *kalY*
4.	*pul*	*pul* → *purY* + *kalY*

Each of these noun stems undergoes a morphophonemic change before the addition of the plural suffix.

2.3.1.2 Case

Case inflections are obtained in Tamil through two parallel mechanisms — the direct, as in the Nominative and the indirect, as in (other than the nominative) the Oblique. The Nominative case is unmarked in Tamil. The Oblique base in singular represents a stem that is open to further inflections. The Accusative, Dative, Genitive, Sociative, Locative, Benefactive and the Ablative case suffixes follow the Oblique form of the stem.

Case	Case Marker
Nominative	*ϕ*
Accusative	***E***
Dative	*kku* / *ukku* / *akku*
Instrumental	*Al*
Locative	*il* (inanimate.) / *itam* or *kitte* (animate.)
Ablative	*ilirunwu* (animate.) / *itamirunwu* (inanimate)
Genitive	*utYiya* (colloq.) / *awu*, *inY*, *inYawu* (classical.)
Benefactive	*kkAka*
Sociative	*otu* (colloq.) / *utanY* (classical.)

Table 2.1: Case Matters in Tamil

The Accusative case is indicated by the suffix *E*. The Dative case is indicated by the suffix *kku* following a vowel ending stem, or *ukku*, when following a consonant ending stem. The Instrumental case is indicated by the suffix *Al*. The Locative case is indicated by the suffix *itam* or *kitte* for the animate and *il* for the inanimate nouns. Similarly, the Ablative case is marked by the suffix *itamirunwu*, for the animate and *ilirunwu*, for the inanimate nouns. The Genitive case is marked by either *utEiya* or *awu*/*inYawu*. On lines similar to that of the Dative, the Benefactive case is marked by *kkAka* following a vowel ending stem, or *ukkAka* following a consonant ending stem. The Sociative case is indicated by the suffix *otu* or *utanY*.

From among the twenty-four classes of nouns, there are the following five kinds of stems that exhibit allomorphic change for case suffixation. These are: *ArYu*, *kAtu*, *maram*, *narampu* **and** *vaNtu*.

1.	*ArYu*	*ArYu* → *ArY*
2	***kAtu***	*kAtu* → *kAt*
3.	***maram***	***maram*** → *mara*
4.	*narampu*	***narampu*** → *naramp*
5.	*vaNtu*	*vaNtu* → *vaNt*

Apocope, or the loss of the final segment (vowel or consonant) is the single fundamental morphophonemic rule that characterizes these stems.

There are certain morphophonemic changes that operate on noun stems to enable them to take suffixes. Nine such generic instances form the base for case suffixes. These are: *ArYu, eVli, kaN, kAtu, maram, muNY, poVnY, pul* and *pU.*

1.	*ArYu*	*rY*	*ArYu → ArYrY*
2.	*eVli*	*y*	*eVli → eVliy*
3.	*kaN*	*N*	*kaN → kaNN*
4.	*kAtu*	*t*	*kAtu → kAtt*
5.	*maram*	*ww*	*maram → maraww*
6.	*muNY*	*NY*	*muNY → muNYNY*
7.	*poVnYnY*	*nY*	*poVnY → poVnYnY*
8.	*pul*	*l*	*pull → pull*
9.	*pU*	*v*	*pU → pUv*

There are three kinds of morphophonemic rules that operate here:

Gemination

If a noun stem ends in any of the consonants *rY, N, t, NY, nY* or *l,* the latter undergo some morphophonemic change of assimilation in accordance with the following segment of the case suffix.

Glide Insertion

If a noun stem ends in any of the vowels, glide insertion occurs. If the suffix initial vowel is a front vowel, y-insertion occurs, and if it is a back vowel, v-insertion occurs.

Insertion cum Gemination

If a noun stem ends in the nasal '*m*' the consonant *w* is inserted as a geminate before a following vowel.

2.3.1.3 Gender

Eiarly treatises on Tamil noun morphology have made a distinction between *uyartinai* and *akrinai* as referring to +animate and - animate respectively. Arden (1976) describes nouns as being classified into two:

1. High-caste or Rational
2. No-caste or Irrational

The former is a class said to denote "rational persons or beings", and which further divides into the Masculine (that denotes "gods and men") and the Feminine (that denotes "goddesses and women only"). The latter (2) has been ascribed as a set of nouns "denoting animals and inanimate things" and which are regarded as "Neuter".

There are however two formatives *kAranY and kAri,* indicative of the Masculine and Feminine forms of the agentive noun. Examples are: *velEkkAri* (woman servant) *wottakkAranY* (gardener). In addition, Arden (1976) notes the use of the Masculine Singular suffix *AnY,* Feminine *AlY* and Plural suffix *Ar* or *ArkalY,* as attaching to the nominal base to form a personal noun like *sawyavAnY* (a truthful man).

Such suffixes are not very productive, and occur with a relatively small set of nouns. There are a few instances of occurrences like *walEwanY* vs. *walEwi* that can be listed in the lexicon, since gender in such cases is lexically realized rather than morphologically. It **can**

therefore be maintained that Gender as a grammatical category in Tamil is not largely productive.

2.3.1.4 Other Attachments

Apart from Number and Case, other functional elements like Adverbials, Postpositions, Particles and Clitics attach to nouns.

Postpositions and Adverbials attach to nouns only if they are in the Nominative or the Dative case. Adverbials are largely, of a spatial or temporal nature. Particles attach to nouns if they are in the Nominative, Accusative or Dative case. Clitics can be added to any noun form irrespective of number or case.

2.3.1.5 The Nominal Paradigm

On the basis of allomorphy exhibited by nouns when inflected for number and case, nouns are classified into twenty-three distinct sets in order to generate correct word forms. The following table illustrates the features of contrast:

Sl. No.	Noun	Base ending	Base modification	Oblique Singular	Oblique Plural
1	AN	N	∅	∅	+kalY
2	ArYu	rYu	∅	rY >>rYrY	+kalY
3	eVli	i	∅	∅ >>y	+kalY
4	ilE	E	∅	∅ >>y	+kalY
5	iwalYY	lYY	∅	∅	+kalY
6	I	I	∅	∅ >>y	+kkalY
7	kaN	N	∅	N >>NN	+kalY
8	kAl	l	∅	∅	+kalY
9	kAtu	tu	∅	t >>tt	+kalY
10	manYrwanY	nY	nY >>r	∅	+kalY
11	maram	m	m >>f	m >>ww	+kalY
12	mulY	lY	lY >>t	lY >>lYlY	+kalY
13	mAnY	nY	∅	∅	+kalY
14	narampu	u	∅	∅	+kalY
15	nAy	y	∅	∅	+kalY
16	poVnY	nY	∅	nY >>nYnY	+kalY
17	poVy	y	∅	y >>yy	+kalY
18	pul	l	l >>rY	l >>ll	+kalY
19	poVrulY	lY	lY >>t	∅	+kalY
20	pU	U	∅	∅ >>v	+kkalY
21	vaNtu	tu	∅	∅	+kalY
22	wer	r	∅	∅	+kalY
23	wolY	lY	∅	∅	+kalY

Table 2.2: The Nominal Paradigm: Noun Classes

The table records the morphophonemic changes that stems and suffixes undergo in different morphological contexts. The base endings indicate the specific phonological shape

a particular class ends in. The base modifications specify the phonological change the base undergoes prior to number suffixation. The table accounts for five instances of morphophonemic change in the oblique base of the noun stem, and fourteen instances of stem change prior to case suffixation. *kaN* is the basic plural morpheme, used with its allomorphic variant that is phonologically conditioned.

2.3.2 PRONOUNS

Pronouns normally inflect for the categories of number, gender and case. Tamil permits two numbers (Singular and Plural), three grammatical genders (Masculine, Feminine and Neuter), and nine cases (Nominative, Accusative, Dative, Sociative, Genitive, Locative, Instrumental, Benefactive and Ablative).

2.3.2.1 Number

The singular and plural forms of Pronouns are lexically identified as distinctly separate words and therefore the need for recognizing number, as a morphological category of pronouns does not arise. This is the significant difference between nouns and pronouns.

2.3.2.2 Case

The similar set of case markers that apply for nouns, apply for pronouns too. The Nominative and the Oblique, form the primary branching in case marking. The Nominative case remains unmarked. The Oblique case represents a stem that is open to further inflections. The Accusative, Dative, Genitive, Sociative, Locative, Benefactive and the Ablative case suffixes follow the Oblique form of the stem. (For details on case marking refer Table 2.1)

Pronouns are all lexical and fully specified for functional formants in the lexicon. The chief morphophonemics involving pronominal stems is the gemination of the stem final consonant when followed by a vowel initial suffix, when in the oblique form.

Nominative	Oblique1	Oblique2
avvu	*av*	*avvv*
nAnY	*eV'nY*	*eV'nY'nY*
nAfkaN	*eV'fkaN*	*eV'fkaN*
nI	*unY*	*unY'nY*
nIfkaN	*ufkaN*	*ufkaN*
nIr	*um*	*umm*
yAm	*eV'm*	*eV'mm*
wAm	*wam*	*wamm*
nAm	*nam*	*namm*
wAfkaN	*wafkaN*	*wafkaN*
wAnY	*wanY*	*wanY'nY*

Table 2.3: Pronominal Bases

As can be seen, each case involves a distinct vowel or consonant geminate; it is not possible to state a single rule in a segment formant. It proves rather economical to list these forms in the lexicon.

2.3.2.3 Gender, Number, Person

Since every member of the pronominal paradigm forms part of the lexicon, the concept of gender realization is a semantic feature of each of these lexemes. It is only the 3rd. person pronouns in their singular forms, which have the feature of gender. While *avaLY* refers to the 3rd. person Feminine Singular, *avanY* refers to the 3rd. person Masculine, and *awu,* to the 3rd. person Neuter.

2.3.2.4 Other Attachments

like that of a noun, pronouns do take Postpositions, Particles and Clitics to form larger strings to indicate the relevant semantics. Postpositions follow pronouns that are in their Nominative or Dative case. Particles follow pronouns if they are in the Nominative, Accusative or Dative case. Clitics can be appended to any pronominal form irrespective of case.

2.3.2.5 The Pronominal Paradigm

In accordance with the discussion above, fifteen distinct forms of pronouns are required in order to generate correct word forms. The following table illustrates the features of contrast:

Sl. No.	Pronoun	Ending	Oblique Base1	Oblique Base2
1	avalY	lY	∅	∅
2	avanY	nY	∅	∅
3	avar	r	∅	∅
4	awu	u	∅	aw / aww
5	avE	E	∅	avarYrY
6	nAnY	nY	eVnY	eVnYnY
7	nAfkalY	fkalY	eVfkalY	eVfkalY
8	nI	I	unY	unYnY
9	nIfkalY	fkalY	ufkalY	ufkalY
10	nIr	r	um	umm
11	wAfkalY	fkalY	wafkalY	wafkalY
12	wAm	m	wam	wamm
13	wAnY	nY	wanY	wanYnY
14	yAm	m	eVm	eVmm
15	nAm	m	nam	namm

Table 2.4: The Pronominal Paradigm: Pronoun Classes

The table lists the fifteen distinct pronominal forms in their nominative forms with the relevant stem changes alongside each entry in different columns for the distinct oblique counterparts. The base endings indicate the specific phonological shape a particular class ends in. Forms in Oblique2 necessitate a following case suffix, while those in Obliquel do not.

2.3.3 NUMERALS

Numerals form a subcategory of nouns inflecting for categories of number, gender and case. Tamil permits two numbers (Singular and Plural), three grammatical genders (Masculine, Feminine and Neuter), and nine cases (Nominative, Accusative, Dative, Sociative, Genitive, Locative, Instrumental, Benefactive and Ablative). In addition to this there are certain distinct inflections that occur only with numeral words, which make them a distinct subcategory of nouns.

2.3.3.1 Number

The Singular number is unmarked in Tamil. The Plural is indicated by the suffix *kaLY*. All of the classes of numerals have the suffixation of *kaLY* for plurality. The only stem that undergoes morphophonemic change for number suffixation is *Ayiram*, and which undergoes nasal assimilation.

1. *Ayiram* ***Ayiram —* Ayiraf***

2.3.3.2 Case and Ordinality

The Nominative stem remains an unmarked one. The Oblique form of the numeral stem is open to further inflections. There are two kinds of Oblique bases. The first kind, Oblique1, allows case inflections and a specific set of quantitative particles peculiar to the class of numerals. The Accusative, Dative, Cienitive, Sociative, Locative, Benefactive and the Ablative case suffixes follow the Oblique form of the stem. (For a discussion of particles see section 2.3.3.4, Table 2.8)

All classes of numerals exhibit stem allomorphic change in the oblique case, prior to inflection for case, or any other kind of suffixation. There is a morphophonemic difference however, in the stem realization between the two kinds of oblique bases in numeral words. The following table makes a note of stem changes in different phonological and morphological contexts:

No.	Nominative	Oblique 1
1	*oVnYrYu*	*oVnYrY*
2	*iraNtu*	*iraNt*
3	*mUnYrYu*	*mUnYrY*
4	*nAnYku*	*nAnYk*
5	*Enwu*	*Enw*
6	*ArYu*	*ArY*
7	*eLYu*	*eLY*
8	*eVttu*	*eVtt*
9	*oVnYpawu*	*oVnYpaw*
10	*pawwu*	*paww*
11	*nUrYu*	*nUrYrY*
12	*Ayiram*	*Ayiraww*
13	*latcam*	*latcaww*
14	*koti*	*kotiy*

Table 2.5: Numeral Bases - 1

Apocope, the rule of loss of the final segment (vowel or consonant) is the fundamental morphophonemic rule characterizing these stems.

Numerals also assume a similar set of stems to indicate ordinality. The ordinality suffix denoted by *Am* or *Avavu,* effects certain other morphophonemic changes. Two classes of numerals, *nUrYu,* and *Ayiram* illustrate this change:

1. *nUrYu* *nurYu* → *nUrYrY*
2. ***Ayiram*** *Ayiram* → *Ayirawu*

These changes are mainly effected by rules of gemination and assimilation operating on the numeral stem.

2.3.3.3 Gender, Number & Person

In addition to number and case, some of the numeral stems inflect for GNP suffixes as well. It is on the second kind of the oblique stem, Oblique 2, that specific GNP inflections and a set of temporal particles are permissible. The following is a list of the relevant GNP suffixes:

GNP	Suffix
3rd. Sing. Feminine	*wwi*
3rd. Sing. Masculine	*vanY*
3rd. Sing. Honorific/Plural	*var* / *?mar*

Table 26: GNP suffixes for Numerals

Gender, Number and Person inflections are possible up to the first eight classes of numerals. The 3rd.singular masculine, and feminine suffixes, apply only to class 1 of the numeral paradigm, *oVnYrYu.* The 3rd. singular honorific/ plural suffix, applies to all of the other classes (including *oVnYrYu*). A complete list of the numerals that inflect for GNP along with their allomorphic stem variations in the oblique form, could be shown as:

No.	Nominative	Oblique 2
1	*oVnYrYu*	*oVru*
2	*iraNtu*	*iru*
3	*mUnYrYu*	*mU*
4	*nAnYku*	*nAl*
5	*Enwu*	*E*
6	*ArYu*	*aru*
7	*elYu*	*eVlYu*
8	*eVttu*	*eVN*
9	*oVnYpawu*	-
10	*pawwu*	-
11	*nUrYu*	-
12	*Ayiram*	-
13	*latcam*	-
14	*koti*	-

Table 2.7: Numeral Bases - 2

[2] Applies only in the case of the numeral *el ittu*

Morphophonemic changes in the case of GNP suffixation in numerals are complex, and the phonological processes involve more than a single level of transformation or derivation.

2.3.3.4 Other Attachments

Adverbials, Postpositions, Particles, Clitics and Vocatives are the other inflections that apply-on numerals. Adverbials that follow particles need to be followed by the locative or dative case. Postpositions follow numerals that are in their Nominative or Dative case.

Two different sets of particles attach to numerals in their oblique form. Quantative Particles such as *(e)kAl* 'quarter', *arE* 'half', *arEkkAl* 'one-eigth', *(e)mukkAl* 'three-quarters', occur after Oblique 1 forms, while certain other Particles such as those indicative of like *maNi* 'o'clock', occur after the Nominative form of classes other than *oVnRYu*, in which case it occurs only after its Oblique 2 form. Other particles like *peVyar* 'number of persons' occur after the nominative forms of numerals.

The following table indicates a list of permissible inflectional combinations applicable to each allomorph:

Sl.No.	Numeral	Case Suffixes	Ordinality *(Am/Arawu)*	Particles1 *(maNi)*	Particles2 *(ekAl, atE, atEkkAl,mukkAl)*	Class1 Particles *(kAl, cila, cilar, cirYu)*	Particle other than for Class1 *(peVyar)*
1	*oVnYrYu*	×	×	×	×	×	×
2	*oVnYrY*	✓	✓	×	✓	×	×
3	*oVru*	×	×	✓	×	✓	×
4	*iraNtu*	×	×	✓	×	×	✓
5	*iraNt*	✓	✓	×	✓	×	×
6	*iru*	×	×	×	×	×	×
7	*mUnYrYu*	×	×	✓	×	×	✓
8	*mUnYrY*	✓	✓	×	✓	×	×
9	*mU*	×	×	×	×	×	×
10	*nAnYku*	×	×	✓	×	×	✓
11	*nAnYk*	✓	✓	×	✓	×	×
12	*nAl*	×	×	×	×	×	×
13	*Enwu*	×	×	✓	×	×	✓
14	*Enw*	✓	✓	×	✓	×	×
15	*E*	×	×	×	×	×	×
16	*ArYu*	×	×	✓	×	×	✓
17	*ArY*	✓	✓	×	✓	×	×
18	*aru*	×	×	×	×	×	×
19	*elYYu*	×	×	✓	×	×	✓
20	*elYY*	✓	✓	×	✓	×	×
21	*eVlYYu*	×	×	×	×	×	×
22	*eVttu*	×	×	✓	×	×	✓
23	*eVtt*	✓	✓	×	✓	×	×
24	*eVN*	×	×	×	×	×	×
25	*oVnYpawu*	×	×	✓	×	×	✓
26	*oVnYpaw*	✓	✓	×	✓	×	×
27	*pawwu*	×	×	✓	×	×	✓
28	*paww*	✓	✓	×	✓	×	×

Table 2.8: Permissible Suffixes in Numerals

2.3.3.5 The Numeral Paradigm

On the basis of allomorphy exhibited by numerals when inflected for number, case/ordinality and GNP, fourteen distinct classes of numerals are required in order to generate correct word forms. The following table illustrates the features of contrast:

Sl. No.	Numeral	Oblique1	Oblique2	Ordinality Suffix
1	oVnYrYu	oVnYrY	oVru	muwal
2	iraNtu	iraNt	iru	_Am/Avawu
3	mUnYrYu	mUnYrY	mU	_Am/Avawu
4	nAnYku	nanYk	nAl	_Am/Avawu
5	Enwu	Enw	E	_Am/Avawu
6	ArYu	ArY	arYu	_Am/Avawu
7	elYYu	elYY	eVlYYu	_Am/Avawu
8	eVttu	eVtt	eVN	_Am/Avawu
9	oVnYpawu	oVnYpaw	∅	_Am/Avawu
10	pawwu	paww	∅	_Am/Avawu
11	nUrYu	nUrYrY	∅	_Am/Avawu
12	Ayiram	Ayiraww	∅	∅
13	latcam	latcaww	∅	∅
14	koti	koti	∅	∅

Table 2.9: The Numeral Paradigm; Numeral Classes

The table lists the fourteen distinct numeral forms in their nominative forms with the relevant stem changes along with their oblique corresponding forms. Case inflections and ordinality markers can occur after Oblique 1 bases, while GNP inflections can append to the Oblique 2 base forms.

2.3.4 VERBS

Verbs chiefly inflect for tense, aspect and modality. Tamil records 3 tenses (Past, Present, Future), 5 aspects (Verbal Participles, Positive Conditional, Negative Conditional, Durative Conditional, Infinitive), 6 modals (Negative Past, Negative Future, Hortative, Admonitive, Prohibitive, Imperative).

2.3.4.1 Tense

Verbs in Tamil have three morphological tenses: the Past, Present and the Future

2.3.4.1.1 PAST

Verbs can be classified into fourteen classes, based on allomorphic variations exhibited by the verb stem bctorc the past tense suffix. The following is a list of paradigmatic classes of verbal declension in the past tense.

From among the 24 classes of verbs, there are 14 stems that exhibit allomorphic change before past tense suffixation. These are: *Aku, AlY,cA, ceVl, coVl, kAN, keltY, koVlY, nil, no, peVrYu, potu, vA* and *wUfku.*

Sl.No	Root	Stem	Morphophonemic Process
1	*Aku*	*A*	Final Syllable Deletion
2	*AlY*	*AN*	Assimilation
3	*alYYu*	-	-
4	*cA*	*ceV*	Vowel Shortening
5	*ceVl*	*ceVnY*	Assimilation
6	*ceVy*	-	-
7	*coVl*	*coVnY*	Assimilation
8	*eVnY*	-	-
9	*ikalYY*	-	-
10	*iru*	-	-
11	*kAN*	*kaN*	Vowel Shortening
12	*keltY*	*ket*	Assimilation
13	*koVlY*	*koVN*	Assimilation
14	*nil*	*ninY*	Assimilation
15	*no*	*noV*	Vowel Shortening
16	*pati*	-	-
17	*peVrYu*	*peVrY*	Final Vowel Deletion
18	*po*	-	-
19	*potu*	*pot*	Final Vowel Deletion
20	*pUN*	-	-
21	*uN*	-	-
22	*vA*	*va*	Vowel Shortening
23	*vilYYu*	-	-
24	*wUfku*	*wUfk*	Final Vowel Deletion

Table 2.10(a): **Verb Stem** Allomorphy in **the Past Tense forms**

Various kinds of morphophonemic rules come into operation in the instance of stem changes. There are 7 kinds of variations in the past tense suffixes. These are: *nY, t, ww, rY, w, nw* and *inY.*

Sl.No	Verb Stem	Past Suffix	Variant Change	Morphophonemic Process
1	*Aku*	*nY*	*AnY*	Final Syllable Deletion
2	*AlY*	*t*	*ANt*	Assimilation
3	*alYYu*	*w*	*alYYuw*	-
4	*cA*	*ww*	*ceVww*	Vowel Shortening
5	*ceVl*	*rY*	*ceVnYrY*	Assimilation
6	*ceVy*	*w*	*ceVyw*	-
7	*coVl*	*nY*	*coVnYnY*	Assimilation
8	*eVnY*	*rY*	*eVnYrY*	-
9	*ikalYY*	*nw*	*ikalYYnw*	-
10	*iru*	*nw*	*irunw*	-
11	*kAN*	*t*	*kaNt*	Vowel Shortening
12	*keltY*	*t*	*kett*	Assimilation
13	*koVlY*	*t*	*koVNt*	Assimilation
14	*nil*	*rY*	*ninYrY*	Assimilation

15	*no*	*nw*	*noVnw*	Vowel Shortening
16	*pati*	*ww*	*patiww*	-
17	*peVrYu*	*rY*	*peVrYrY*	Final Vowel Deletion
18	*po*	*nY*	*ponY*	-
19	*potu*	*t*	*pott*	Final Vowel Deletion
20	*pUN*	*t*	*pUNt*	-
21	*uN*	*t*	*uNt*	-
22	*vA*	*nw*	*vanw*	Vowel Shortening
23	*viNYu*	*nw*	*viNYunw*	-
24	*wUfku*	*inY*	*wUfkinY*	Final Vowel Deletion

Table 210(b): Verb Suffix Allomorphy in the Past Tense forms

There are three kinds of morphophonemic rules that operate here:

Apocope

There are 4 instances of final vowel deletion in the verbal paradigms. If a verbal base ends in the vowel *u*, which is preceded by a stop consonant, the vowel gets deleted before suffixarion of the past tense marker.

Assimilation

There are 6 instances, or rather 3 types, of assimilation in the verbal paradigm, particularly along with rule of gemination. Specific changes include *lY* to *N*, /to *nY* and fl^to /. The trend can be described as a liquid assimilating to a nasal stop, in the context of a stop.

Vowel Shortening

There are 4 instances of vowel shortening in the verbal paradigm. Any of the verbal stems, that end in a vowel gets shortened if it is followed by a stop or a sequence of nasal + stop.

Apart from the Past tense, aspectuals like the Past Adjectival Participle, Positive Verbal Participle and the Positive Conditionals also inflect on the same base. The Past Adjectival Participle involves an additive *a*, after the past tense marker, the Positive Verbal Participle involves an additive *u* or i, and the Positive Conditional, and additional *AL*

23.4.1.2 PRESENT

Verbs can be classified into five classes, based on allomorphic variations exhibited by the verb stem for the present tense. There are 5 stems that exhibit allomorphic change before present tense suffixation. These are: *Aku, keNY, koVNY, ml pUN* and *vA*. The following is a list of paradigmatic classes of verbal declension in the present tense.

Sl.No	Root	Stem	Morphophonemic Process
1	*Aku*	*A*	Final Syllable Deletion
2	*ANY*	-	-
3	*aNYu*	-	-
4	*cA*	-	-
5	*ceVl*	-	-
6	*ceVy*	-	-
7	*coVl*	-	-
8	*eVnY*	-	-
9	*ikaNY*	-	-

10	*iru*	-	-
11	*kAN*	-	-
12	*keḷY*	*ket*	Assimilation
13	*koVṭY*	-	-
14	*niḷ*	*niṟY*	Assimilation
15	*no*	-	-
16	*pati*	-	-
17	*peVṟY'u*	-	-
18	*po*	-	-
19	*potu*	-	-
20	*pUN*	*pUNu*	Vowel Insertion
21	*uN*	-	-
22	*vA*	*varu*	Final Syllable Insertion
23	*viṉṉu*	-	-
24	*wUṛku*	-	-

Table 2.11(a): Verb Stem Allomorphy in the Present Tense forms

The present tense suffix is *kiṟY*, that functions as default, excepting in cases of stems that end in the vowels *u* or *i*, where the allomorphic variant *kkiṟY* appears. The following is how the present tense suffix allomorphs *kiṟY* and *kkiṟY* are distributed.

Sl.No	Verb Stem	Present Suffix	Variant Change	Morphophonemic Process
1	*Aku*	*kiṟY*	*AkiṟY*	-
2	*AṭY*	*kiṟY*	*AṭYkiṟY*	-
3	*aṉṉu*	*kiṟY*	*aṉṉukiṟY*	-
4	*cA*	*kiṟY*	*cAkiṟY*	-
5	*ceVl*	*kiṟY*	*ceVlkiṟY*	-
6	*ceVy*	*kiṟY*	*ceVykiṟY*	-
7	*coVl*	*kiṟY*	*coVlkiṟY*	-
8	*eVṉY*	*kiṟY*	*eVṉYkiṟY*	-
9	*ikaṉṉ*	*kiṟY*	*ikaṉṉkiṟY*	-
10	*iru*	*kkiṟY*	*irukkiṟY*	Gemination
11	*kAN*	*kiṟY*	*kANkiṟY*	-
12	*keḷY*	*kiṟY*	*ketkiṟY*	-
13	*koVṭY*	*kiṟY*	*koVṭYkiṟY*	-
14	*niḷ*	*kiṟY*	*niṟYkiṟY*	-
15	*no*	*kiṟY*	*nokiṟY*	-
16	*pati*	*kkiṟY*	*patikkiṟY*	Gemination
17	*peVṟY'u*	*kiṟY*	*peVṟYukiṟY*	-
18	*po*	*kiṟY*	*pokiṟY*	-
19	*potu*	*kiṟY*	*potukiṟY*	-
20	*pUN*	*kiṟY*	*pUNukiṟY*	-
21	*uN*	*kiṟY*	*uNkiṟY*	-
22	*vA*	*kiṟY*	*varukiṟY*	-
23	*viṉṉu*	*kiṟY*	*viṉṉukiṟY*	-
24	*wUṛku*	*kiṟY*	*wUṛkukiṟY*	-

Table 2.11(b): Verb Suffix Allomorphy in the Present Tense (bans

In instances where a verb stem ends in short vowel, the suffix geminates its initial stop consonant.

2.3.4.1.3 FUTURE

Verbs can be classified into five classes, based on allomorphic variations exhibited by the verbs before the future tense suffix. There are 5 stems that exhibit allomorphic change. These are: *Aku, keḷY, nil, pUN,* and *vA*. The following is a list of paradigmatic classes of verbal declension in the future tense.

Sl.No	Root	Stem	Morphophonemic Process
1	*Aku*	*A*	Final Syllable Deletion
2	*AḷY*	-	-
3	*aḷYYu*	-	-
4	*cA*	-	-
5	*ceVl*	-	-
6	*ceVy*	-	-
7	*coVl*	-	-
8	*eVṉY*	-	-
9	*ikaḷYY*	-	-
10	*iru*	-	-
11	*kAN*	-	-
12	*keḷY*	*ket*	Assimilation
13	*koVḷY*	-	-
14	*nil*	*nirY*	Assimilation
15	*no*	-	-
16	*pati*	-	-
17	*peVṟY u*	-	-
18	*po*	-	-
19	*potu*	-	-
20	*pUN*	*pUNu*	Vowel Insertion
21	*uN*	-	-
22	*vA*	*varu*	Final Syllable Insertion
23	*viḷYY u*	-	-
24	*vUfku*	-	-

Table 2.12(a): Verb Stem Allomorphy in the Future Tense forms

There are 3 variants of the future tense suffix. These are: *v,p* and *pp*. 17 of these stems take *v*, 5 take *p*, and 2 take the geminate *pp*. The following is how the future tense suffix allomorphs *v,p* and *pp* are distributed.

Sl.No	Verb Stem	Future Suffix	Variant Change	Morphophonemic Process
1	*Aku*	*v*	*Av*	-
2	*AḷY*	*v*	*AḷYv*	-
3	*aḷYYu*	*v*	*aḷYYuv*	-
4	*cA*	*v*	*cAv*	-
5	*ceVl*	*v*	*ceVlv*	-
6	*ceVy*	*v*	*ceVyv*	-
7	*coVl*	*v*	*coVlv*	-
8	*eVṉY*	*p*	*eVṉYp*	-
9	*ikaḷYY*	*v*	*ikaḷYYv*	-
10	*iru*	*pp*	*irupp*	Gemination

11	*kAN*	*p*	*kANp*	-
12	*keḶ*	*p*	*ketp*	-
13	*koVḶ*	*v*	*koVḶv*	-
14	*nil*	*p*	*nirṶp*	-
15	*no*	*v*	*nov*	-
16	*pati*	*pp*	*patipp*	Gemination
17	*peVṙṶu*	*v*	*peVṙṶuv*	-
18	*po*	*v*	*pov*	-
19	*potu*	*v*	*potuv*	-
20	*pUN*	*v*	*pUNuv*	-
21	*uN*	*p*	*uNp*	-
22	*vA*	*v*	*varuv*	-
23	*viḶṶu*	*v*	*viḶṶuv*	-
24	*wUfku*	*v*	*wUfkuv*	-

Table 2.12(b): Verb Suffix Allomorphy in the Future Tense forms

There are three kinds of morphophonemic rules that operate here:

- **Deletion**

In deletion, the final consonant and vowel sequence i.e., a syllable gets deleted, prior to the addition of a glide.

- **Assimilation**

As examples of assimilation, the retroflex lateral *Ḷ* changes to the obstruent *t*, in the context of the following obstruent. The change can be described as a liquid assimilating to a stop, if the context is governed by another stop consonant.

- **Gemination**

The suffix geminates, if the verb stem's penultimate vowel is short.

2.3.4.2 Aspect

2.3.4.2.1 INFINITIVE

The Infinitive form serves as the basis for many non-finite verbal stems. Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems before the infinitive. The 14 classes that decline for the infinitive form are: *Aku, aḶṶu, keḶ, nil peVṙṶu, potu, vA, viḶṶu* **and** *wUfku.*

Sl.No	Root	Stem	Morphophonemic Process
1	*Aku*	*Ak*	Final Syllable Deletion
2	*AḶ*	*AḶ*	Assimilation
3	*aḶṶu*	*aḶṶ*	-
4	*cA*	*cA*	Vowel Shortening
5	*ceVl*	*ceVl*	Assimilation
6	*ceVy*	*ceVy*	-
7	*coVl*	*coVl*	Assimilation
8	*eVṉṶ*	*eVṉṶ*	-
9	*ikaḶṶ*	*ikaḶṶ*	-
10	*iru*	*iru*	-
11	*kAN*	*kAN*	Vowel Shortening

12	*keN*	*ket*	Assimilation
13	*koVN*	*koVN*	Assimilation
14	*nil*	*nirY*	Assimilation
15	*no*	*no*	Vowel Shortening
16	*pati*	*pati*	-
17	*peVrY'u*	*peVrY*	Final Vowel Deletion
18	*po*	*po*	-
19	*potu*	*pot*	Final Vowel Deletion
20	*pUN*	*pUN*	-
21	*uN*	*uN*	-
22	*vA*	*var*	Vowel Shortening
23	*viNY'u*	*viNY*	-
24	*wUfku*	*wUfk*	Final Vowel Deletion

Table 2.13(a): Verb Stem Allomorphy in the Infinitive forms

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are two instances of assimilation. There are 7 suffix variants for the infinitive form. These are: *a, ka, la, ya, kka, NYa* and *Na.*

Sl.No	Verb Stem	Infinitival Suffix	Variant Change	Morphophonemic Process
1	*Aku*	*A*	*Ak*	-
2	*AN*	*A*	*AN*	-
3	*aNY'u*	*A*	*aNY*	-
4	*cA*	*ka*	*cA*	-
5	*ceVl*	*la*	*ceVl*	-
6	*ceVy*	*ya*	*ceVy*	-
7	*coVl*	*la*	*coVl*	-
8	*eVnY*	*a*	*eVnY*	-
9	*ikaNY*	*a*	*ikaNY*	-
10	*iru*	*kka*	*iru*	Gemination
11	*kAN*	*a*	*kAN*	-
12	*keN*	*ka*	*ket*	-
13	*koVN*	*NYa*	*koVN*	-
14	*nil*	*ka*	*nirY*	-
15	*no*	*ka*	*no*	-
16	*pati*	*kka*	*pati*	Gemination
17	*peVrY'u*	*a*	*peVrY*	-
18	*po*	*ka*	*po*	-
19	*potu*	*a*	*pot*	-
20	*pUN*	*a*	*pUN*	-
21	*uN*	*Na*	*uN*	-
22	*vA*	*a*	*var*	-
23	*viNY'u*	*a*	*viNY*	-
24	*wUfku*	*a*	*wUfk*	-

Table 2.13(b): Verb Suffix Allomorphy in the Infinitive forms

There are three kinds of morphophonemic rules that operate here:

2. Apocope + Insertion

Classes 1, 2, 3, 17, 19, 23 and 24 involve first, a deletion of the stem final vowel, that is in turn replaced by the infinitive marker *a.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2 PARTICIPLES

Participles are of two types: Adjectival and Verbal.

2.3.4.2.2.1 Adjectival

Adjectival Participles branch into the Past, Present, Habitual and the Negative, according to the corresponding tense base.

2.3.4.2.2.1.1 PAST ADJECTIVAL PARTICIPLE

Verbs can be classified into 12 classes, based on allomorphic variations exhibited by the verb stems for the Past Adjectival Participle. The 12 stems that decline for the past adjectival form, are: *Aku, aNYu, keNY, nil, peVrYu, potu, vA, viNYu* and *wUfku*.

1.	*Aku*	*Aku → AnY*
2.	*AlY*	*AlY → AN*
3.	*cA*	*cA → ceV*
4.	*kAN*	*kAN → kaN*
5.	*keNY*	*keNY → ket*
6.	*koVNY*	*koVNY → koVN*
7.	*nil*	*nil → nirY*
8.	*no*	*no → noV*
9.	*peVrYu*	*peVrYu → peVrY*
10.	*potu*	*potu → pot*
11.	*vA*	*vA → va*
12.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 8 suffix variants for the past adjectival participial form. These are: *a.ta, uuva, wa, rYa, nYnYa, nuva* and *inYa*.

1.	*Aku*	+	*a*	*Aku → AnYa*
2.	*AlY*	+	*ta*	*aY → ANta*
3.	*cA*	+	*uuva*	*cA → ceVuuva*
4.	*ceVy*	+	*wa*	*ceVy → ceVywa*
5.	*ceVl*	+	*rYa*	*ceVl → ceVnYrYa*
6.	*coVl*	+	*nYnYa*	*coVNY → coVnYnYa*
7.	*iru*	+	*nuva*	*iru → iruuva*
8.	*wUfku*	+	*inYa*	*wUfku → wUfkinYa*

There are three kinds of morphophonemic rules that operate here:

- Apocope

Classes 1, 2, 3, 17, 19, 23 and 24 involve deletion of the stem final vowel, that is in turn replaced by the past adjectival participial marker *a*.

- **Insertion**

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

- **Gemination**

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.1.2 PRESENT ADJECTIVAL PARTICIPLE

Verbs can be classified into two classes, based on allomorphic variations exhibited by the verb stem for the present adjectival participial form. Allomorphy is simple, if any. Verb stems do not undergo any phonological change. The present tense suffix is *kirY*, that functions as default, excepting in cases of stems that end in the vowels *u* or *i*, where the allomorphic variant *kkirY* appears. The Present Adjectival Participle involves an additive *a*, after the present tense marker. The following is how the suffixes *kiiYa* and *kkirYa* for the present adjectival participle function.

1.	***Aku***	***kiiYa***	***Aku*** → *AkukirYa*
2.	*iru*	***kkiiYa***	*iru* → ***irukkirYa***

In instances where a verb stem ends in short vowel, the suffix geminates its initial stop consonant.

2.3.4.2.2.1.3. HABITUAL ADJECTIVAL PARTICIPLE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Habitual Adjectival Participle. The 9 stems that decline accordingly, for the **habitual participle are:** ***Aku.*** *aNYu, keNY, nil, peVrYu, potuA,* ***viNYu*** and *wUfku.*

1.	*Aku*	*Aku* → *Ak*
2.	*aNYu*	*aNYu* → *aNY*
3.	*keNY*	*keNY* → *ket*
4.	*nil*	*nil* → *nirY*
5.	*peVrYu*	*peVrYu* → *peVrY*
6.	*potu*	*potu* → *pot*
7.	*vA*	*vA* → *var*
8.	*viNYu*	*viNYu* → *viNY*
9.	*wUfku*	*wUfku* → *wUfk*

Most of these changes **involve** final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the habitual form. **These are:** ***urn, kum, lum, yum, kkum, NYurn*** and ***Num.***

1.	*Aku*	+	*um*	*Aku* → *Akum*
2.	*cA*	+	*kum*	*cA* → *cAkum*
3.	*ceVl*	+	*lum*	*ceVl* → *ceVllum*

4.	*ceVy*	+	*yum*	*ceVy → ceVyyum*
5.	*iru*	+	*kkum*	*iru → irukkum*
6.	*koVñY*	+	*ñYum*	*koVñY → koVñYñYum*
7.	*uN*	+	*Num*	*uN → uNNum*

There are three kinds of morphophonemic rules that operate here:

Apocope

Classes 1, 2, 3, 17, 19, 23 and 24 involve first, a deletion of the stem final vowel that is in turn replaced by the habitual adjectival participial marker *um.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.1.4 NEGATIVE ADJECTIVAL PARTICIPLE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Negative Adjectival Participle. The 9 stems that decline accordingly, are: *Aku, aññYu, keñY*, **ml** *peVrYu,* **potu,** *vA*, ***riWYu*** **and** *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*aññYu*	*aññYu → aññY*
3.	*keñY*	*keñY → ket*
4.	*nil*	*nil → nirY*
5.	*peVrYu*	*peVrYu → peVrY*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viññYu*	*viññYu → viññY*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the negative **adjectival participial form. These are:** *Awa, kAwa, lAwa, yAwa, kkAwa, ñYAwa* and *NAwa.*

1.	*Aku*	+	*Awa*	*Aku → AkAwa*
2.	*cA*	+	*kAwa*	*cA → cAkAwa*
3.	*ceVl*	+	*lAwa*	*ceVl → ceVllAwa*
4.	*ceVy*	+	*yAwa*	*ceVy → ceVyyAwa*
5.	*iru*	+	*kkAwa*	*iru → irukkAwa*
6.	*koVñY*	+	*ñYAwa*	*koVñY → koVñYñYAwa*
7.	*uN*	+	*NAwa*	*uN → uNNAwa*

There are three kinds of morphophonemic rules that operate here:

Apocope

Classes 1, 2, 3, 17, 19, 23 and 24 involve first, a deletion of the stem final vowel, that is in turn replaced by the negative adjectival participial marker *Awa.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.2 Verbal

The Verbal Participles branch into the Positive and the Negative.

2.3.4.2.2.2.1 POSITIVE VERBAL PARTICIPLE

Verbs can be classified into 14 classes, based on allomorphic variations exhibited by the verb stems for the Positive Verbal Participle. The 14 stems that decline accordingly, are: *Aku. AÑ, aÑŸu,cA, ceVl, coVl, kAN, keÑ, koVÑ, nil, no, peVrŸu, potu,vA*, and *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*AÑ*	*AÑ → AN*
3.	*cA*	*cA → ceV*
4.	*ceVl*	*ceVl → ceVnŸ*
5.	*coVl*	*coVl → coVnŸ*
6.	*kAN*	*kAN → kaN*
7.	*keÑ*	*keÑ → ket*
8.	*koVÑ*	*koVÑ → koVN*
9.	*nil*	*nil → nirŸ*
10.	*no*	*no → noV*
11.	*peVrŸu*	*peVrŸu → peVrŸ*
12.	*potu*	*potu → pot*
13.	*vA*	*vA → var*
14.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 8 instances of assimilation. There are 8 suffix variants for the positive verbal participial form. These are: *t, tu, uu, uuu, nuu, rŸu, it*, and *y*.

1.	*Aku*	+	*i*	*Aku → Aki*
2.	*AÑ*	+	*tu*	*AÑ → ANtu*
3.	*cA*	+	*uuu*	*cA → ceVuuu*
4.	*ceVy*	+	*uu*	*ceVy → ceVyuu*
5.	*coVl*	+	*li*	*coVl → coVli*
6.	*ikaÑŸ*	+	*nuu*	*ikaÑŸ → ikaÑŸnuu*
7.	*peVrŸu*	+	*rŸu*	*peVrŸu → peVrŸrŸu*
8.	*po*	+	*y*	*po → poy*

There are three kinds of morphophonemic rules that operate here:

Apocope

Classes 1, 2, 3, 17, 19, 23 and 24 involve deletion of the stem final vowel, which is in turn replaced by the positive verbal participial marker *i* or *u*.

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.2.2 NEGATIVE VERBAL PARTICIPLE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Negative Verbal Participle. The 9 stems that decline accordingly, are: *Aku, aḷḷu, keḷ, mlpeṛṛu, potu, vA, viḷḷu* and *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*aḷḷu*	*aḷḷu → aḷḷ*
3.	*keḷ*	*keḷ → ket*
4.	*ml*	*ml → nirṛ*
5.	*peṛṛu*	*peṛṛu → peṛṛ*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viḷḷu*	*viḷḷu → viḷḷ*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the negative verbal participial form. These are: *AmaL, kAmal, lAmal, yAmal, kkAmaL ḷḷAmal* and *NAmal.*

1.	*Aku*	+	*Amal*	*Aku → AkAmal*
2.	*cA*	+	*kAmal*	*cA → cAkAmal*
3.	*ceṛl*	+	*lAmal*	*ceṛl → ceṛllAmal*
4.	*ceṛy*	+	*yAmal*	*ceṛy → ceṛyyAmal*
5.	*iru*	+	*kkAmal*	*iru → irukkAmal*
6.	*koṛḷ*	+	*ḷḷAmal*	*koṛḷ → koṛḷḷḷAmal*
7.	*uN*	+	*NAmal*	*uN → uNNAmal*

There are three kinds of morphophonemic rules that operate here:

Apocope

Classes 1, 2, 3, 17, 19, 23 and 24 involve deletion of the stem final vowel, which is in turn replaced by the negative verbal participial marker *AmaL*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.3 Conditional

The Conditionals branch into the Positive and the Negative.

2.3.4.2.2.3.1 Positive Conditional

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Positive Conditional. The 9 stems that decline accordingly, are: *Aku, alYYu, keY, nil, peVrYu, potu, vA, viIYYu* and *wUfku*.

1.	*Aku*	*Aku → AnY*
2.	*AIY*	*AIY → AN*
3.	*cA*	*cA → ceV*
4.	*kAN*	*kAN → kaN*
5.	*keIY*	*keIY → ket*
6.	*koVIY*	*koVIY → koVN*
7.	*nil*	*nil → nirY*
8.	*no*	*no → noV*
9.	*peVrYu*	*peVrYu → peVrY*
10.	*potu*	*potu → pot*
11.	*vA*	*vA → va*
12.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 8 suffix variants for the positive conditional form. These are: *Al, tAl, unuAl, uAl, rYAl, nYnYAl, nuA l* and *inYAl*.

1.	*Aku*	+	*Al*	*Aku → AnYAl*
2.	*AIY*	+	*tAl*	*AIY → ANtAl*
3.	*cA*	+	*unuAl*	*cA → ceVunuAl*
4.	*ceVy*	+	*uAl*	*ceVy → ceVyuAl*
5.	*ceVl*	+	*rYAl*	*ceVl → ceVnYrYAl*
6.	*coVl*	+	*nYnYAl*	*coVIY → coVnYnYAl*
7.	*iru*	+	*nuAl*	*iru → irunuAl*
8.	*wUfku*	+	*inYAl*	*wUfku → wUfkinYAl*

There are three kinds of morphophonemic rules that operate here:

- Apocope

Classes 1, 2, 3, 17, 19, 23 and 24 involve deletion of the stem final vowel that is in turn replaced by the positive conditional marker *Al*.

- Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

- Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.3.2 Negative Conditional

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the negative conditional. The 9 stems that decline hereby, are: *Aku.alYYu, keIY, nil, peVrYu, potu, vA, viIYYu* and *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*alYYu*	*alYYu → alYY*
3.	*keIY*	*keIY → ket*
4.	*nil*	*nil → nirY*
5.	*peVrYu*	*peVrYu → peVrY*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viIYYu*	*viIYYu → viIYY*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the negative conditional form. These are: *AvittAl, kAvittAl, lAvittAl, yAvittAl, kkAvittAl, IYAvittAl* and *NAvittAl.*

1.	*Aku*	+	*AvittAl*	*Aku → AkAvittAl*
2.	*cA*	+	*kAvittAl*	*cA → cAkAvittAl*
3.	*ceVl*	+	*lAvittAl*	*ceVl → ceVllAvittAl*
4.	*ceVy*	+	*yAvittAl*	*ceVy → ceVyyAvittAl*
5.	*iru*	+	*kkAvittAl*	*iru → irukkAvittAl*
6.	*koVIY*	+	*IYAvittAl*	*koVIY → koVIYIYAvittAl*
7.	*uN*	+	*NAvittAl*	*uN → uNNAvittAl*

There are three kinds of morphophonemic rules that operate here:

- **Apocope + Insertion**

Classes 1, 2, 3, 17, 19, 23 and 24 involve deletion of the stem final vowel, which is in turn replaced by the negative conditional suffix, *AvittAL*

- **Insertion**

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

- **Gemination**

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.2.2.3.3 Durative Conditional

From among the 24 classes of verbs, there are 14 stems that exhibit allomorphic change prior to the realization of the durative conditional. The verb stems that inflect for the durative conditional suffix are: *Aku, AIY, cA, ceVl, coVL kAN, keIY, koVIY nil, no, peVrYu, potu, vA* and *wUfku.* The Durative Conditional involves the marker *kkoVNtiru,* on the positive verbal participial base of the verb. The following is a list of the relevant verb declensions:

1.	*Aku*	*Aku → Ak*
2.	*AlY*	*AlY → AN*
3.	*cA*	*cA → ceV*
4.	*ceVl*	*ceVl → ceVnY*
5.	*coVl*	*coVl → coVnY*
6.	*kAN*	*kAN → kaN*
7.	*kelY*	*kelY → ket*
8.	*koVlY*	*koVlY → koVN*
9.	*no*	*no → noV*
10.	*nil*	*nil → ninY*
11.	*peVrYu*	*peVrYu → peVrY*
12.	*potu*	*potu → pot*
13.	*vA*	*vA → va*
14.	*wUfku*	*wUfku → wUfk*

There are 8 kinds of variations in the suffixes. These are: *ikkoVNtiru, tukkoVNtiru, wukkoVNtiru, wwukkoVNtiru, rYukkoVNtiru, likkoVNtiru, nwukkoVNtiru* and *kikkoVNtiru.*

1.	*Aku*	+	*ikkoVNtiru*	*Aku → AkikkoVNtiru*
2.	*AlY*	+	*tukkoVNtiru*	*AlY → ANtukkoVNtiru*
3.	*cA*	+	*wwukkoVNtiru*	*cA → ceVwwukkoVNtiru*
4.	*ceVl*	+	*rYukkoVNtiru*	*ceVl → ceVnYrYukkoVNtiru*
5.	*coVl*	+	*likkoVNtiru*	*coVl → coVllikkoVNtiru*
6.	*no*	+	*nwukkoVNtiru*	*no → noVnwukkoVNtiru*
7.	*po*	+	*ykkoVNtiru*	*po → poykkoVNtiru*
8.	*wUfku*	+	*ikkoVNtiru*	*wUfku → wUfkikkoVNtiru*

There are three kinds of morphophonemic rules that operate here:

Apocope

There are 4 instances of final vowel deletion in the verb paradigm. Classes 1, 17, 19 and 24 exhibit this property'. If a verbal base ends in the vowel *u*, which is preceded by a stop consonant, the final vowel gets deleted before suffixation of the past tense marker.

Assimilation

There are 6 instances, or rather 3 types, of assimilation in the verb paradigm. Classes 2, 5, 7, 12, 13 and 14 exhibit this property, particularly along with rule of gemination. Specific changes include *lY* to *N*, *l* **to** *nY* and *lY* to *t*. The trend can be described as a liquid assimilating to a nasal, if the context is governed by a geminate.

Vowel Shortening

There are 4 instances of vowel shortening in the verb paradigm. Any of the verbal stems, that end in a vowel gets shortened if it is followed by a stop or a sequence of nasal + stop.

2.3.4.3 Mood

2.3.4.3.1 NEGATIVE PAST

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Negative Past. The 9 stems that decline hereby are: *Aku, alYu, kelY, nil, peVrYu, potu, vA, vilYu* and *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*aNYu*	*aNYu → aNY*
3.	*keN*	*keN → ket*
4.	*nil*	*nil → nirY*
5.	*peVrYu*	*peVrYu → peVrY*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viNYu*	*viNYu → viNY*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the negative past form. These are: *villE, kavillE, lavillE, yavillE, kkavillE, NavillE* and *NavillE*.

1.	*Aku*	+	*avillE*	*Aku → AkavillE*
2.	*cA*	+	*kavillE*	*cA → cAkavillE*
3.	*ceVl*	+	*lavillE*	*ceVl → ceVllavillE*
4.	*ceVy*	+	*yavillE*	*ceVy→ ceVyyavillE*
5.	*iru*	+	*kkavillE*	*iru → irukkavillE*
6.	*koVN*	+	*NavillE*	*koVN → koVNNavillE*
1.	*uX*	+	*NavillE*	*uN → uNNavillE*

There are three kinds of morphophonemic rules that operate here:

Apocope + Insertion

Classes 1, 2, 3, 17, 19, 23 and 24 involve the deletion of the stem final vowel, which is in turn replaced by the negative past marker *avillE*.

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.3.2 NEGATIVE FUTURE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Negative Future. The 9 stems that decline hereby are: *Aku, aNYu, keN, nil, peVrYu, potu, vA. viNYu* and *wUfku*.

1.	*Aku*	*Aku → Ak*
2.	*aNYu*	*aNYu → aNY*
3.	*keN*	*keN → ket*
4.	*nil*	*nil → nirY*
5.	*peVrYu*	*peVrYu → peVrY*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viNYu*	*viNYu → viNY*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the negative future form. These are: *amAtt, kamAtt, lamAtt, yamAtt, kkamAtt, tfamAtl* and *NamAtt.*

1.	*Aku*	+	*amAtt*	*Aku → AkamAtt*
2.	*cA*	+	*kamAtt*	*cA → cAkamAtt*
3.	*ceVl*	+	*lamAtt*	*ceVl → ceVllamAtt*
4.	*ceVy*	+	*yamAtt*	*ceVy → ceVyyamAtt*
5.	*iru*	+	*kkamAtt*	*iru → irukkamAtt*
6.	*koVñY*	+	*ñamAtt*	*koVñY → koVñYñamAtt*
7.	*uN*	+	*NamAtt*	*uN → uNNamAtt*

There are three kinds of morphophonemic rules that operate here:

Apocope + Insertion

Classes 1, 2, 3, 17, 19, 23 and 24 involve the deletion of the stem final vowel, which is in turn replaced by the negative future marker *amAtt.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.3.3 HORTATIVE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Hortative. The 9 stems that decline hereby are: *Aku, aññu, keñ, nil, peVrñu, potu, vA, viññu* and *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*aññu*	*aññu → aññ*
3.	*keñ*	*keñ → ket*
4.	*nil*	*nil → nirñ*
5.	*peVrñu*	*peVrñu → peVrñ*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viññu*	*viññu → viññ*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the hortative form. These are: *alAm, kalAm, lalAm, yalAm, kkalAm, fiTalAm* and *NalAm.*

1.	*Aku*	+	*alAm*	*Aku → AkalAm*
2.	*cA*	+	*kalAm*	*cA → cAkalAm*
3.	*ceVl*	+	*lalAm*	*ceVl → ceVllalAm*
4.	*ceVy*	+	*yalAm*	*ceVy → ceVyyalAm*
5.	*iru*	+	*kkalAm*	*iru → irukkalAm*
6.	*koVñY*	+	*ñalAm*	*koVñY → koVñYñalAm*

7.	*uN*	+	*NalAm*	*uN → uNNalAm*

There are three kinds of morphophonemic rules that operate here:

Apocope + Insertion

Classes 1, 2, 3, 17, 19, 23 and 24 involve the deletion of the stem final vowel that is in turn replaced by the hortative marker *alAm.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.3.4 ADMONITIVE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Admonitive. The 9 stems that decline hereby are: *Aku. aṉṟu, keṉṟ, nil, peVṟṟu, potu,* **vA,** *viṉṟu* and *wUfku.*

1.	*Aku*	*Aku → Ak*
2.	*aṉṟu*	*aṉṟu → aṉṟ*
3.	*keṉṟ*	*keṉṟ → ket*
4.	*nil*	*nil → nirṟ*
5.	*peVṟṟu*	*peVṟṟu → peVṟṟ*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*viṉṟu*	*viṉṟu → viṉṟ*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the admonitive **form. These arc:** *a. ka, la, ya, kka. ṉṟa* **and** *Na.*

1.	*Aku*	+	*a*	*Aku → Aka*
2.	*cA*	+	*ka*	*cA → cAka*
3.	*ceVl*	+	*la*	*ceVl → ceVlla*
4.	*ceVy*	+	*ya*	*ceVy → ceVyya*
5.	*iru*	+	*kka*	*iru → irukka*
6.	*koVṉṟ*	+	*ṉṟa*	*koVṉṟ → koVṉṟṉṟa*
7.	*uN*	+	*Na*	*uN → uNNa*

There are three kinds of morphophonemic rules that operate here:

Apocope + Insertion

Classes 1, 2, 3, 17, 19, 23 and 24 involve the deletion of the stem final vowel that is in turn replaced by the admonitive marker *a.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A srop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

mination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.3.5 PROHIBITIVE

Verbs can be classified into 9 classes, based on allomorphic variations exhibited by the verb stems for the Prohibitive. The 9 stems that decline hereby are: *Aku, alYYu, kelY, nil, peVrYu, potu, vA, vilYYu* and *wiJfku.*

1.	*Aku*	*Aku → Ak*
2.	*alYYu*	*alYYu → alYY*
3.	*kelY*	*kelY → ket*
4.	*nil*	*nil → nirY*
5.	*peVrYu*	*peVrYu → peVrY*
6.	*potu*	*potu → pot*
7.	*vA*	*vA → var*
8.	*vilYYu*	*vilYYu → vilYY*
9.	*wUfku*	*wUfku → wUfk*

Most of these changes involve final vowel deletion of the stem, in the case of a following vowel. There are 2 instances of assimilation. There are 7 suffix variants for the prohibitive form. These are: *Aw, kAw. lAw, yAw, kkAw, lYAw* and *NAw.*

1.	*Aku*	+	*Aw*	*Aku → AkAw*
2.	*cA*	+	*kAw*	*cA → cAkAw*
3.	*ceVl*	+	*lAw*	*ceVl → ceVllAw*
4.	*ceVy*	+	*yAw*	*ceVy → ceVyyAw*
5.	*iru*	+	*kkAw*	*iru → irukkAw*
6.	*koVlY*	+	*lYAw*	*koVlY → koVlYlYAw*
7.	*uN*	+	*NAw*	*uN → uNNAw*

There are three kinds of morphophonemic rules that operate here:

Apocope + Insertion

Classes 1,2, 3, 17, 19, 23 and 24 involve the deletion of the stem final vowel that is in turn replaced by the prohibitive marker *Aw.*

Insertion

Classes 4, 10, 12, 14, 15, 16 and 18 involve insertion. A stop consonant segment gets inserted between the stem and the suffix, when the verb ends in a vowel.

Gemination

Classes 5, 6, 7, 13, and 21 are examples of gemination where, the suffix geminates the consonant or glide that the verb stem ends in.

2.3.4.3.6 IMPERATIVE

The Imperative always assumes the basic, rather the uninflected form of the verb. The only suffixes possible are the plural or the honorific, in which case, the addition of the plural or honorific suffix, *ufkalY* is required.

classes of verbs are affected by the morphophonemic rule of apocope, during the suffixation of the plural/honorific marker. These are: *Aku, alYYu, iru, peVrYu, potu, viYYu* and *wUfku.*

1. *Aku* *Aku → Ak*
2. *alYYu* *alYYu → alYY*
3. *iru iru → ir*
4. *peVrYu* *peVrYu → peVrY*
5. *potu* *potu → pot*
6. *viVYu* *viYYu → viYY*
1. *wUfku* *wUfku → wUfk*

The basic rule in stem change is that of final vowel deletion, in the context of a following vowel segment. The morphophonemics involved here, falls in line with the pattern of the 'infinitive'. The suffix varies based on the phonological nature of the stems it attaches itself to.

1. *cA* + *kufkaY* *cA → cAkufkaY*
2. *ceVl* + *lufkaY* *ceVl → ceVlufkaY*
3. *ceVy* + *yufkaY* *ceVy → ceVyufkaY*
4. *koVY* + *YufkaY* *koVY → koVYufkaY*
5. *pati* + *yufkaY* *pati → patiyufkaY*
6. *uN* + *Nufkay* *uN → uNNufkaY*
7. *vA* + *rufkaY* *vA → vArufkaY*

There are two kinds of morphophonemic rules that operate here:

Insertion

Classes 4, 10, 16, 18 and 22 are examples of insertion, wherein a consonant segment gets inserted between the stem and the suffix. This often happens when the verb ends in a long vowel.

Gemination

Classes 5, 6, 7, 13, 14 and 21 are examples of gemination where, the suffix geminates the consonant that the verb stem ends in.

2.3.4.4 Other Attachments

Apart from Tense, Modal and Aspectual features, verbs also take on other functional elements like Adverbials, Particles, Auxiliary verbs, Clitics and Vocative Clitics. They also inflect for Gender, Number and Person.

Particles attach to both finite and non-finite verbs, as do Clitics and Vocative Clitics. Finite forms of a verb take on GNP suffixes after they inflect for tense. Adverbials and Auxiliary verbs attach only to non-finite forms of a verb.

2.3.4.5 The Verb Paradigm

Considering verbal variations based on different kinds and levels of inflections, paradigms of distinct, attested verb forms representative of their class had been established. Based on the verb stem and suffix allomorphy a total of twenty-four classes of verbs have been identified:

Sl.No.	Base1/ Suffix1	Base2/Suffix2 (Future)	Base3/Suffix3 (Present)	Base4/Suffix4 (Future)	Base5/Suffix5 (Non-Finite)
1	Aku	A] nY	A] kirY	A] v	Ak] a
2	AlY	AN] t	AlY] kirY	AlY] v	AlY] a
3	alYYu	alYYu] w	AlYYu] kirY	alYYu] v	alYY] a
4	cA	ceV] ww	cA] kirY	cA] v	cA] ka
5	ceVl	ceVnY] rY	ceVl] kirY	ceVl] v	ceVl] la
6	ceVy	ceVy] w	ceVy]kirY	ceVy] v	ceVy]ya
7	coVl	coVnY] nY	coVl] kirY	coVl] v	coVl] la
8	eVnY	eVnY] rY	eVnY] kirY	eVnY] p	eVnY] a
9	ikalYY	ikalYY] nw	ikalYY] kirY	ikalYY] v	ikalYY] a
10	iru	iru] nw	iru] kkirY	iru] pp	iru] kka
11	kAN	kaN] t	kAN] kirY	kAN] p	kAN] a
12	kelY	ket] t	ket] kirY	ket] p	ket] ka
13	koVlY	koVN] t	koVlY] kirY	koVlY] v	koVlY] lYa
14	nil	ninY] rY	nirY] kirY	nirY] p	nirY] ka
15	no	noVnY] w	no] kirY	no] v	no] ka
16	pati	pati] ww	pati] kkirY	pati] pp	pati] kka
17	peVrYu	peVrY] rY	peVrYu] kirY	peVrYu] v	peVrY] a
18	po	po] nY	po] kirY	po] v	po] ka
19	potu	pot] t	potu] kirY	pot] v	pot] a
20	pUN	pUN] t	pUNu] kirY	pUNu] v	pUN] a
21	uN	uN] t	uN] kirY	uN] p	uN] Na
22	vA	va] nw	varu] kirY	varu] v	var] a
23	vilYYu	vilYYu] nw	vilYYu] kirY	vilYYu] v	vilYY] a
24	wUfku	wUfk] inY	wUfku] kirY	wUfku] v	wUfk] a

Table 2.14: The Verbal Paradigm: Verb Classes

The table records the morphophonemic changes that stems and suffixes undergo in different morphological contexrs. The base endings indicate the specific phonological shape a particular class ends in. The base modifications specify the phonological change the base undergoes prior to number suffixation.

2.3.5 ADJECTIVES

Adjectives in Tamil are of two kinds: Basic, and Derived. A few basic adjectives are *nalla, cinYnYa, and puwu.* Inflectionally, adjectives do have specific affixal patternings peculiar to them alone, to mark them off as a category on their own. Morphologically therefore, one cannot rule out adjectives as an inflecting class[1]. Adjectives in Tamil do not morphologically mark comparative and superlative degrees of relation. To syntactically express these, either of the two nominal postpositions, *pola,* and *vita* is used after the bound form of a noun, which

[1] For a discussion on how adjectives form a distinct morphological class, refer Ch.6, sec.6.1

performs the predicative adjectival function. Although adjectives can be derived from both nouns and verbs taking the suffixes, what really brings in morphological distinction, is the phenomenon of Affixal Homonymy. Adjectives generally inflect for GNP, and certain Particles and Postpositions.

2.3.5.1 Gender, Number, Person

It is only the 3rd. person GNP suffixes that can follow adjectives. These are as follows:

GNP	Suffix
3rd. Sing. Feminine	*avaN*
3rd. Sing. Masculine	*avanY*
3rd. Sing. Honorific/Plural	*avar*
3rd. Sing. Neuter	*awu*

Table 2.15: GNP suffixes for Adjectives

Class 1 in the adjectival paradigm remains unmarked, and therefore directly takes any of these suffixes onto its unmarked bound base. Class 2 has to be followed by the GNP base marker *iya*, before taking on any of these suffixes. Both classes of adjectives exhibit stem allomorphic change for the bound base and GNP. As far as bound stem formation is concerned, stems of Class 2 stems lose their final vowel in their bound form.

1. *nalla* *nalla—* nall*
2. *puwu* *puwu→ puw*

In the case of GNP suffixation, stems of Class 2 stems lose their final vowel prior to the addition of GNP suffixes.

1. *nalla* *nalla—* nall*
2. ***puwu*** *puwiya→ puwiy*

Apocope is the important change that these stems involve.

2.3.5.2 Other Attachments

There are certain comparative Particles that follow adjectival forms such as *mAwiri*, *viwam* and *pati*. All of these particles need to be followed by the adverbial postposition *Aka*, while occurring after an adjectival base.

2.3.5.3 The Adjectival Paradigm

Only two classes of adjectives can be morphologically established. They have been considered distinct due to allomorphy of the base. Whereas *nalla* does not exhibit any morphophonemic variation, the form *puwu* undergoes a change to the bound form, *puwiya*. Based on such a distinction, the following adjectival paradigm has been established:

Sl. No.	Stem1/Suffix1	Stem2/Suffix2	Stem3/Suffix3
1	nalla] ∅	nalla] ∅	nalla] ∅
2	puwu] ∅	puw] iya	puwiya] ∅

Table 2.16: The Adjectival Paradigm: Adjective Classes

The table lists two distinct adjectival forms in their free/direct forms with the relevant stem changes along with their corresponding bound /indirect forms. GNP inflections can occur on the bound forms, after the augment *iya*.

Chapter 3

Modeling Morphology

3.1 Linguistic Theories

As has already been discussed in Ramaswamy, V. (2000), theories of morphology greatly differ in their view with respect to the morpheme, as a building block or as a basic unit of morphological analysis. The relevant issues in the pursuit of research in morphology therefore remain in focus with respect to the identification and the realization, of the unique and unified functional aspects of the basic morphological unit.

Hockett's, two models of morphology viz, the Item and Arrangement (1958), and Item and Process (1958) embody Structuralism in morphology. A morpheme, in that sense, was 'the smallest individually meaningful elemenr in the utterance of a language' (Hockett.1958: 123).

The Item and Arrangement **(IA)** assumes a concatenative approach wherein morphemes are lexical units, morphology is an agglutination of such units, and words are seen as linear sequences of morphs. The central observation of the model is that certain forms reflect a partial phonetic-semantic resemblance to other forms. Describing the morphological patterning of a language would in consequence involve — a specification, of the inventory of morphemes (items), of the possible sequences in which these morphemes can occur (arrangement), and defining those morphs through which every morpheme of the language is realized (a morphological link). A word is analyzed as involving no process at all, but only a permissive sequence of morphemes. The IA model is thus essentially morphemic, but non-processual.

The **Item and** Process (IP) model works on the conception that word-forms constitute paired features of structure and function, or rather form and meaning, and that elements undergo a variety of modifications, through transformations, to result in newer forms. Morphology is regarded as a set of derivational processes, acting on morphemes or words, producing new word-forms. Hence in IP, there is only one recognized underlying basic allomorph that contextually takes the form of an allomorph.

In contrast, the **Word and** Paradigm (WP) (Robbins 1963), model of morphology takes the 'word' operating within a paradigm of variables, as its basic unit. The WP model is distinct in that it focuses primarily on each word as a whole, and on its overall effect to the unique set of properties that it expresses. The model evades complexities since it divides the word into two parallel non-overlapping units: one for formal elements, and the other for functional properties. In the WP framework, it is a morphophonemic (MP) rule, a conglomerated set of morphosyntactic and morphosemantic operations that align with a word, and not a phonological (P) rule. Parallel to instances in analysive phonology, there

exist no absolute constraints that might limit the nature or number of correspondences between morphological properties and morphological forms.

Stump (1998) describes the word and paradigm approach to inflection as follows: "a rule's applicability to a stem X is conditioned by the set of morphosyntactic properties associated with **X**, by X's phonological form, by X's membership in a particular morphological class, or by some combination of such factors." Rules of inflection here are specified into sets each of which applies to only one of its kind. With regard to the role of paradigm, the supposition is like this: "a is a cell in the paradigms of lexemes belonging to some class C, and that the *paradigm function* for cell σ is that function f_σ such that for each L∈ C, f_σ applies to the root of L to yield the word form occupying σ; one can then say that the sequence of rule blocks in a language may vary according to the definition of its individual paradigm functions."

Generative grammar developed a remarkably powerful device in grammatical theory, i.e., transformations, a computational tool connecting different linguistic levels. Morphological processes were rather derivational mechanisms than transformational operations. Leading to the proposal of the Lexicalist **Hypothesis** (Chomsky1970), which expressed the need for an autonomous component of morphology in Generative grammar. The theory addressed two central claims about the organization of the grammar of a language: (1) that all morphological operations are governed by the lexical component; (2) that all morphological facts are accounted for, by specific rules called *Word Formation Rules* (WFRs).

Halle's (1973) proposition was the first model consistent with the Lexicalist Hypothesis. As to the association between morphology and native intuition, Halle developed a model constituting an inventory of morphemes, a set of WFRs, a Filter to rule out possible but non-existent words analyzed by WFRs, and a Dictionary containing all and only the actual words of the language, in all their paradigmatic forms, ready to undergo lexical insertion. A major point of disagreement, against this however culminated in what was called later, the ***Word-Based*** model, as proposed by Aronoff (1976). Aronoff s hypothesis has the following claims to make: (1) All regular word-formation processes are word-based; (2) A new word is formed by applying a regular rule to a single already existing word; (3) Both the new word and the existing one are members of major lexical categories.

The Word-Based approach distinguishes two different kinds of rules, operating at two levels: Word Formation Rules (WFRs), and Readjustment Rules (RRs). According to Aronoff (1976), WFRs function not merely in deriving new words, they also account for their internal structure. Readjustment rules are those of the lexical component, which operate after the WFRs. Readjustment rules are optional in the sense that they need to operate only if the morphological environment demands so.

The **Word Network** model (Singh and Ford 1984) following a relational approach to morphology, establishes firmly the dependency of morphology on the lexicon. The approach defines morphology on two primary ideals: (1) the basis of morphological analysis is not the morpheme, but the word; (2) words, as units relate to each other through complex networks.

The Word Network model has certain fundamental assumptions as to what the nature of morphology is: (1) Rejection of 'multiple morphologies. No distinction is made between binary types such as inflectional vs. derivational, concatenative vs. non-concatenative, or non-linear etc. (2) Determining the 'word' as the basic unit upon which morphology operates. No morphological status is given to concepts like 'root', 'stem', lexeme', etc.

(3) Persistence on a 'unified' morphological operation. No intermediate level of representation between morphology and phonology is allowed. (4) Insistence on word 'networks' rather than operations. No morphological operation has any privileged direction, such as giving rise to concepts of *'basic'* or 'derived' forms. (5) The contention that no category is exclusively determined morphologically is strongly favored. (6) Sustenance of the morphological integrity of the word. No conditions or constraints are to be postulated. (e.g. No place for anything like the 'adjacency condition').

Morphology, here, JS seen as 'the study of words that are formally and semantically related.' In order to be considered a 'word', an expression must be characterized as having three features: (1) a phonological form (2) a category and (3) a meaning. The Word Network model proposes a single unified theory that captures cross-linguistic generalizations. It presupposes universals in morphology. A rule known as a Morphological Strategy (MS) or a Word Formation Strategy (WFS) defines morphological relationships between words.

3.2 Psycholinguistic Theories

3.2.1 Storage Ami Retrieval Of Morphological Structure from The Mental Lexicon

One general view of morphology describes it as dealing fundamentally 'with the internal structure of the potentially complex words of a language.' All of these words might not be actually existent, but all of these are governed by the set pattern of morphological operations. Different views of the 'lexicon' are held. Contrary to the general conception of the lexicon of a language', the lexicon has been treated as exclusively an individualistic, independent, internalized linguistic component. Either way, the lexicon can be best defined as ' a list of existing items in the language, those that a speaker has to know because they are arbitrary signs: unpredictable in some way' (Aronoff & Anshen 1998)

A priori, one might be led to infer that, since morphology trades in potential words, and the lexicon, only in actually existing ones, the two might not have anything substantially common enough to relate to each other. As a matter of fact, this could be proved a misconception, for two valid reasons: (1) both morphology and the lexicon, dealing primarily with words, serve the same linguistic function. (2) morphology and the lexicon, share a fundamentally interdependent relation.

Quoting Aronoff *8c* Anshen (1998), "The difference between which words exist and which are potential is defined solely in terms of the individual's lexicon and morphology.' That morphology and the lexicon proceed from each other is implied by the production of morphologically complex words. This is largely through the application of morphological rules, to actually occurring base words that are stored in a speaker's mental lexicon. Another instance of lexical words being governed by rules of morphology is in the 'inheritance of irregularity' wherein complex words having conventional semantics exhibit a slight variation from their predicted sense. The morphology depends on the lexicon, however, inasmuch as the bases of morphologically complex words are normally lexical entries'

Several views of word recognition processes in morphological theory have been proposed as possible solutions to the question of how morphological structures are represented in the central lexicon. Various queries arise, in this regard.

I quote (McQueen & Cutler 1998), "Is the mental lexicon organized in a way which codes morphological relationships? For example, is the fact that two words share the same stem, or the same affix, coded in the lexicon? This is primarily a question of representation: what information about the internal structure of words is stored in long-term memory and how? But it is also a question of processing. When a word and its morphology are recognized, does this involve contact with other entries (words and/or morphemes) in the lexicon? What role does morphological structure play in the process of mapping perceptual information, from spoken or written input, on to the mental lexicon? Again there are questions of both processing and representation: what type of morphological parsing must take place, and what form of access representations might be the product of such a process?"

Do humans actually parse words while they access it? And if they do, what theoretical, logical or, statistical assumptions underlie these analyses? These remain another set of questions. Regardless of what might determinedly answer these, or what can be decidedly established about the question, whether there are as many morphologies as there are speakers, is that, morphology provides a common universal framework across a number of lexica, since rule patternings are unexceptional. Though a lexicon may be regarded as an individualized conception, morphological processes capture generalizations that surface evenly across different lexica. Differences in the lexicon need not imply differences in morphology.

To study the differing views about the role of morphology in lexical access, the following psychological models of morphology may be considered.

3.22 Kinds Of Models

A volley of questions can be raised with respect to the psycholinguistic modeling of morphology. Does perception of morphological structure play a role in access, or arise from it? Are stems and affixes stored and retrieved in the same way, in conjunction with each other, in the same lexicon, or are different records and processes involved? As to the nature of the lexicon and the representation of word forms therein, might the storage be so abstract as to obliterate differences between written, spoken, read and heard forms of words? Or, might it be considered as an assemblage of separate, but interlinked, specialist lexicons?

Such are the critical questions that relate to the status of morphological structure in lexical access. The question of how words of a language are accessed from the lexicon is rather decisive to how the human mind parses complex words. In an attempt to examine mental morphology, a few vital psycholinguistic models of word-recognition were explored. Different theories of lexical access have been proposed, a discussion of which follow suit.

3.2.2.1 STRING-SCAN MODELS

The Transition Network Model

Forster (1976) suggests a direct model of lexical access that tries to retrieve a word from the mental lexicon based on the principle of manual dictionary search for a required string. The mechanism is that of a transition network, which scans for the string from left to right, sequentially progressing with each letter at a time, until the string is exhausted. At each phase, the transition progresses if a match is found, with backtracking occurring wherever

necessary. Search for a string is according to that of a dictionary search, with phonological conditioning filtering an improbable output. A finite state network for the word determines if the progress is on correct lines.

Although economy has been noted in:

- Merging of Pathways: A merging of pathways is achieved by merely stating a single instance of a letter for each position in a word. A structural positioning of letter-elements would enable search paths to define the existence of particular entries.
- Number of Pathways: The instances of specified pathways through the network are less than the number of all possible transitions.
- Structure of Pathways: The structure of a pathway may often correctly determine the word form, even before the completion of the scan.

The disadvantages the model however faces, as Forster observes are:

- Non-words are more easily detectible
- Longer words consume a longer time to be accessed.

The model has been observed to fail in accounting for an aspect of lexical access that takes into account the word-frequency factor. The model in fact seems to be more of a phoneme-detection model, rather than a word-detecting one. Moreover, Garman's (1990:262) observation cannot be overlooked in what he points out as a shortcoming in the mechanism: "We know that the normal sort of dictionary is in the form of a book, in which all the separately listed items are spelled out fully; but this involves considerable redundancy in the interests of ease of use in turning over the pages and scanning their contents; and it is possible that this sort of organization is not required and actually too cosdy, as far as the mental lexicon is concerned."

The Autonomous Search Model

After the letdown of the direct method, Forster's (1979) alternative was a two-stage processing model with a serial mode of operation where the first stage ends before the second begins. In the first stage, the search is ordered by frequency of the lexical items. Unlike the earlier model, focus is on frequency-rank ordering rather than physical structure. Rather than a scanning of the input string, an abstract location marker in the second phase of operation helps gain access to the lexical item, based on a hint obtained in *the* first phase. The mechanism is similar to that of cataloguing. A master file holds the catalogued information, which aids further access and retrieval.

The Autonomous Search model has the following implications:

- High frequency words are accessed faster than low-frequency words.
- Rejection of non-words takes a longer time than the acceptance of real words.

Experiments however observe that the theoretical and logical tenets of the two-stage model aren't really promising.

The Logogen Model

Morton's (1969) analyzer claims prospective assumptions about the lexical identity of the input string apparent at each stage, with an aided correlation between phonological analysis and lexical access.

Words are realized on the basis of selectively tuned response characteristics. The system does not merely rely on the specific linguistic properties, but is also able to pick up signals to the presence of a word from extra-linguistic signals as well. These are the *Logogens*, the tuned perceptual devices that respond to sensory and semantic input. The sensory and contextual inputs interact, and give rise to outputs, to the cognitive system.

The Logogen model implies that high-frequency words have lower thresholds associated with them, and hence require less processing to yield access. Forster questions the efficiency of the filtering mechanism in this model. In other words high frequency items are more available both as correct and incorrect responses. Although this has been noted as truly a word-detection model[1] that focuses on the auditory/visual properties of words, their contexts, and frequency ranking of words, the incapacity to reject incorrect analyses makes the model not very popular.

The Cohort Model

Designed by Marslen-Wilson & Welsh (1978), this has been an improvement upon the transition network, and the logogen models in which activation levels can be precisely stated. Instead of a partial activation of logogens in some unknown proportions, a preference of only two degrees of activation has been suggested, - zero or, full.

A complete activation of all members of a *cohort* occurs on the basis of the first item of the input sequence. Thereafter, instead of the summation of partial activations to individual threshold values, there would be a progressive elimination of fully activated items, as the left-to-right processing of the sequence continues. The point of recognition would be determined, not by the end of the string, but by the elimination of the last alternative letter from the cohort.
Hybrid features of the earlier models effect vital implications here:

- It embodies the sequential nature of the auditory signal direcdy into the nature of word-recognition.
- There is a 'uniqueness' point at which the item diverges in linear structures from all other words in the language (and the cohort).

The cohort model follows the *letter-tree* theory as discussed in Knuth (1973). Theoretically though, the mechanism and predictions of the model could not be confirmed by tfieorists like Katz et al. (1987).

3.2.2.2 CATEGORY-SPLIT MODELS

Henderson's review of the Taft & Forster Model

This was the first time a psycholinguistic model makes explicit the role of morphological analysis in word recognition, specifically considering the model for written word recognition by Taft and Forster (1975). The process involves a stripping of affixes from stems 'prior to' lexical access. (See Fig. 3.1) Crucial to its operation is the identification of word boundaries. The following is a flow chart that illustrates the working of this model.

[1] In Forster's sense.

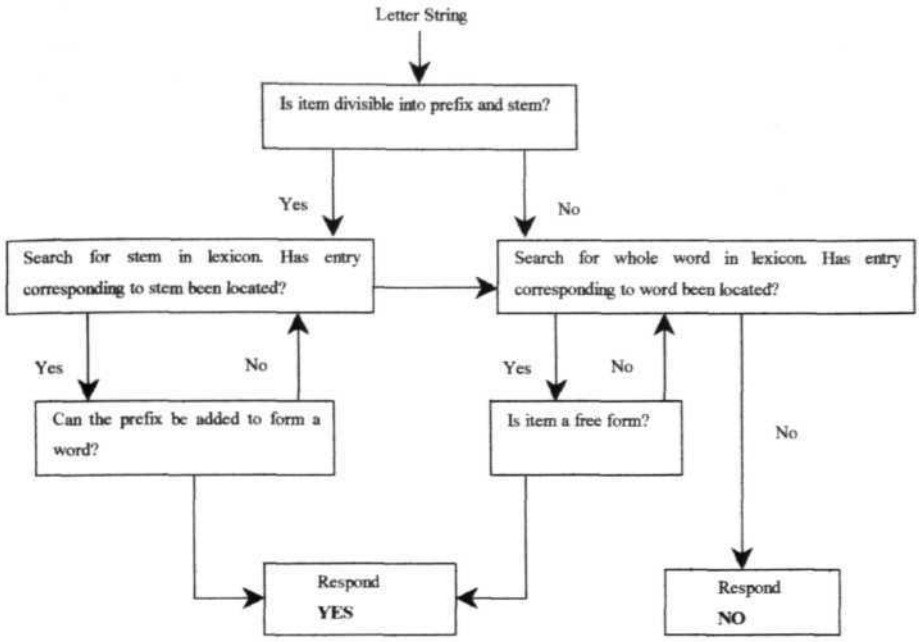


Figure 3.1 Morphological analysis in word recognition.
(From Taft **and** Forster 1975: fig. 1, p.644.) as reproduced in Garman (1990: 275)

The model is a serial one that operates on a set of stages in an ordered fashion. Such a decomposition model, argue Taft and Forster, allows for economy of stored representations, since a stem need be represented, by merely a single instance of itself. Stripping operates at each level, and lexical search continues on the basis of the remnant stem. As conceived by Henderson, the model requires a lexicon with a set of stem-morpheme entries, and a set of composition rules activated by the stripped affixes, and which in rum determine the characteristics of particular word formations.

Augmented Addressed Morphology

This is in opposition to the Taft & Forster model, which believes in lexical access through morphological decomposition. Carama2za et al (1988) defend the theory of 'augmented addressed morphology', which supports the view that morphologically complex words simultaneously trigger both the whole word, and its constituent morphemes, in the mental lexicon. Lexical access via achieved through whichever form is encountered first, by the subject. This is in opposition to the Taft & Forster model, which believes in lexical access through morphological decomposition. Experiments have however shown that the predictions made are not in accord with results.

Satellite Entries Model

Lukatela et al (1988) hold the claim to the *satellite entries* model. The hypothesis states a basic allomorph that holds together all other allomorphs in a relational manner. This slightly differs from the IP theory of morphology, in the sense that instead of derivation of allomorphs from a base form, they are linked to each other relationally, in the WN fashion.

Sproat (1992) is of the view that the Lukatela model can be accommodated within a model of morphological parsing. Emphasis is on the base allomorph, through which all other allomorphs relate.

Separate-Entries Model

Another 'separate-entries' model (S. Andrews 1986; Fowler et al. 1985; Grainger et aL 1991; Schreuder et al. 1990; Schriefers et al. 1991, 1992) believes that the various forms of a word ought to be accessed via their surface form. This has its basis on the frequency of the various surface forms.

Naïve Decompositional Model

The naive 'decompositional' model is on the lines of the Taft & Forster model that maintains lexical access through stems and affixes.

3.3 Implications Of Psycholinguistic Findings

The fact that native speakers have the internal knowledge of the morphological structure of their language and that they access the lexicon via morphological decomposition, has been established through psychological evidence (Caramazza et al. 1988; Taft & Forster 1975; Tyler & Nagy 1990; Holmes & O'Regan 1992; Laudanna et al. 1992; Marslen Wilson 1994). Undoubtedly therefore a preference for category-split models, over string-scan models appears favourable.

Forster's model can be computationally viewed as a hash-table representation of the lexical database. Hash codes generated on the basis of the first few letters would lead on to the main lexicon. Forster's prediction however, about the transition network model that predicts a word before its realization, appears to go wrong in respect of the reaction time the concerned word, fails to evoke.

That, words are ordered by frequency-rank in the mental lexicon is almost instinctive. Nevertheless, designing a computational model might not be plausible, since such a concept cannot be wholly accommodative as it were. On these lines, the autonomous search model too does not appear to be popular.

3.4 A Fitting Model For Computational Purposes

The questions posed by Sproat (1992) are:

- Does the model of lexical retrieval used in the system resemble a good deal of what humans actually do?
- A majority of computational models of considerable interest involve greater or lesser amounts of morphological decomposition; are the algorithms and representations employed reasonable models of the way humans do things?

Psychological reality in morphological analysis is a prerequisite to a system that believes in natural language parsing in an intuitive way. Accessing a word from the mental lexicon can be either *pre-lexical* (indirect) or *post-lexical* (direct). A pre-lexical access would involve processing of the input up to the point of entry into the lexicon. In other words, words are split up into their constituent morphemes before they are identified or retrieved from the mental lexicon. Post-lexical processing occurs after a lexical entry has been accessed. Its phonological and graphological form specifications become simultaneously available for analysis.

Although studies on the Taft & Forster model had been viewed as unsuccessful by Emmorey (1998), experiments have indeed revealed that real stems and real affixes are easily rejected as non-words, than pseudo-stems and pseudo-affixes. Whatever be the inferences, the claim that inflectional class vitally determines the process of morphological decomposition, is what is of consequence here. McQueen & Cutler (1998) opine: "Access to morphologically structured lexical representations, ... need not involve morphological structure overtly, decomposition of derived forms may be an optional procedure, available when the whole-word access procedure fails."

Experiments have established that for English, analysis of words began with stripping of items that resembled prefixes, proceeded to stems and then to suffixes. Relative access time for an entry is a controversial issue in such models.

Any computational representation of morphology needs to ingrain certain aspects of psychological evidence to explicate the nature of natural language processing in the human mind. Bearing in mind the pros and cons of the models considered, it can be reasoned out that any category-split model that accounts for a reasonable level of morphological analysis that bases itself either on the IA, IP, or on a model that features a blend of both, could be regarded as feasible for application.

AMPLE as a case in point, would characteristically involve a listing of stems and affixes, along with constraints that define which affix could combine with which stem. Those, in the case of the KIMMO model would be used as 'continuation patterns'. This would presuppose storage of the basic morphological forms, alongside the essential rules of phonology and morphophonology. The analyzer developed in PERL, chooses, for reasons of simplicity, a model that ingrains features of both the IA and the IP model, with a parsing mechanism based on morphological paradigms.

Chapter 4

Nouns, Pronouns, Numerals

4.1 NOUNS

Nouns normally inflect for categories of number, gender and case. Tamil permits two numbers (Singular and Plural), three genders (Masculine, Feminine and Neuter), and eight cases (Nominative, Accusative, Dative, Sociative, Locative, Instrumental, Benefactive and Ablative and one adnominal relation marking the Genitive).

4.1.1 Nominal Classes

On the basis of allomorphy exhibited by nouns when inflected for number and case, twenty - three distinct types of nouns are required in order to generate correct word forms. The following table illustrates the features of contrast:

Sl. No.	Noun	Base Ending	Specialbase	Nom_Pl	Obl_Sing
1	AN	N	-	+kaIY	∅
2	ArYu	rYu	-	+kaIY	+rYrY
3	eVli	i	-	+kaIY	+y
4	ilE	E	-	+kaIY	+y
5	iwaIYY	IYY	-	+kaIY	∅
6	I	I	-	+kkaIY	+y
7	kaN	N	-	+kaIY	+N
8	kAl	l	-	+kaIY	∅
9	kAtu	tu	-	+kaIY	+t
10	manYiwanY	nY	+r (pl.)	+kaIY	∅
11	maram	m	+f (pl.)	+kaIY	+ww
12	muIY	IY	+t (pl.)	+kaIY	+IY
13	mAnY	nY	-	+kaIY	∅
14	narampu	u	-	+kaIY	∅
15	nAy	y	-	+kaIY	∅
16	poVnY	nY	-	+kaIY	+nY
17	poVy	y	-	+kaIY	+y
18	pul	l	+rY (pl.)	+kaIY	+l
19	poVruIY	IY	+t (pl.)	+kaIY	∅
20	pU	U	-	+kkaIY	+v
21	vaNtu	tu	-	+kaIY	∅
22	wer	r	-	+kaIY	∅
23	woIY	IY	-	+kaIY	∅

Table 4.1: Noun Classes

4.1.2 Levels Of Nominal Extensions

Besides case and number that nouns inflect for, they additionally may be followed by certain other suffixes, clitics, particles, special postpositions, and adverbials to indicate various functions. Hence they can be said to have the following levels of extensions:

Level 1: Clitics
Level 2: Particles
Level 3: Postpositions
Level 4: Adverbials

Vocative Clitics are elements of address that occur after an inflected noun. Clitics and Particles may occur after the inflected noun. Postpositions occur only after the nominative, accusative, and the dative forms. They may be added to nominative forms, while they are obligatory, after the accusative, and the dative forms of nouns. Adverbials are added either to the nominative or the dative forms.

4.1.3 Analyzing Nouns

An analysis of nouns in Tamil would begin by stripping off at the morpho-syntactic level, Clitics, and at the purely morphological level, which include various semi-bound and bound Particles and Postpositional and/or Adverbial markers, down to primary inflectional markers of Case and Number. After segmenting items of each level based on their order of occurrence, the stem and/or the base of the noun may be obtained.

4.1.3.1 Clitics

Clitics are morphosyntactic elements by category. According to Halpern (1998), a clitic phonologically refers to 'any prosodically weak (unaccented) element, which is not a canonical inflectional or derivational affix.' Clitics, as distinct from independent words, reflect the inability to constitute an independent utterance. All that needs to be precisely said about clitics is as recorded by Stump (1998) as, 'elements which exhibit an affix-like phonological dependency on a word but whose syntax is word-like'.

The clitics following nouns are as follows:

Clitic	Feature / Function Value
+ um	Conjunctive
+ o	Disjunctive, Complementative, Dubitative
+ e	Emphatic2
+ wAnY	Emphatic1
+ A	Interrogative
+ mattum	Restrictive
+ kUta	Inclusive
+ Avawu	Minimal, Coordinative
+ Am	Suppositive
+ ata	Vocative/3rd. Singular, Masculine
+ atey	Vocative/3rd. Singular, Masculine, / 3rd. Plural, Human
+ atI	Vocative/3rd. Singular, Feminine
+ ayyA	Vocative/3rd. Singular, Human, Honorific, Masculine

+ ammA/mA	Vocative/3rd. Singular, Human, Honorific, Feminine
+ appA/pA	Vocative/3rd. Singular, Human, Honorific, Masculine
+ afka/ufka	Vocative/3rd. Plural, Human, Colloquial

Table 4.2: Clitics

4.1.3.2 Particles

Particles, unlike clitics are more category specific, but less particular than postpositions. They could in a sense be termed as category sensitive clitics. They cannot however, recur on the same base as clitics do. According to Asher (1985), particles are 'invariable bound forms which can be suffixed to a wide range of major sentence constituents (as contrasted with, for instance, case suffixes, which can only be added to nouns and nominalised forms, and tense markers, which can only be affixed to verbal roots).' The particles that follow the nouns inflected for case, both in the singular and plural number are as follows:

Nominative **Particles**	**Feature & Function Value**	**Accusative Particles**	**Feature** & **Function** Value
N_0 + mAwiri	Comparitive	N_E + wavira	Exclusive
N_0 +pol	Comparitive	N_E + vita	Comparitive
N_0 +ponYrYu	Comparitive	N_E + parYrYi	Descriptive
N_0 +e\'nYrYu	Referential		
N_0 + eVnYrYa	Referential		
N_0 + eVnYum	Referential		
N_0 + eVnYa	Referential		
N_0 + eVnYpawu	Referential		
N_0 + eVnYappatuvawu	Referential		

Table 4.3: Particles

4.1.3.3 Postpositions

Nouns in Tamil quite often are attached with a number of postpositions that can be regarded as some sort of reduced adverbials, falling midway between case affixes and particles. Asher (1985) defines a postposition as 'an element that can be added to a nominal to form a postpositional phrase standing in a functional relationship with a verb.' They can be seen as 'a somewhat heterogeneous class with members ranging from fully bound to free forms.' The postpositions that follow nouns in different cases, both in the singular and plural number are as follows:

Nominative Postpositions	Feature & Function Value	Accusative Postpositions	Feature & Function Value	Dative Postpositions	Feature & Function Value
N_Ø + mUlam	Instrumental	N_E + kuriwwu	Referential	N_ukku + Aka	Comparitive
N_Ø + varE	Spatial	N_E + oVtti	Positional	N_ukku + uriya	Possessive
N_Ø + Aka	Comparitive	N_E + koVNtu	Instrumental		
N_Ø + illA	Disjunctive	N_E + wavirwwu	Exclusive		
N_Ø + illAwapowu	Disjunctive	N_E + kAttilum	Comparitive		
N_Ø + illAwa	Disjunctive	N_E + mattilum	Restrictive		

Table 4.4: Postpositions

4.1.3.4 Adverbiais

Nouns in Tamil often take a number of adverbiais, a specific kind of postpositional class of items that denote spatial and temporal relations. They however, much unlike postpositions, could take on more than one category host as anchor. Another characteristic feature of these adverbiais is that they can be inflected further for directional and locational case markers. The following are adverbiais, which are attached to nouns:

Adverbial	Feature & Function Value	Gloss
pinY	Temporal	after
pinYnYAl	Temporal	behind
pinwi	Temporal	next
pinYpu	Temporal	thereafter
pirYaku	Temporal	thereafter
pirYpAtu	Temporal	thereafter
munY	Temporal	before
munYnYAl	Temporal	in front of
munwi	Temporal	previous
munYpu	Temporal	previous
varE	Spatial	till
appuram	Temporal	afterwards
appAl	Directional	beyond
aruwwa	Spatial	next
itE	Positional	between
curYrYi	Directional	around
ulY	Positional	in/inside
veVlYi	Positional	out/outside
mel	Positional	on/upon
kIlYY	Positional	below
mawwi	Positional	in the middle
natu	Positional	at the centre
kurukke	Directional	across
aruke	Directional	near
ati	Positional	below
eVwir	Directional	opposite to
ner	Directional	in front of
kilYYakku	Directional	east
merYku	Directional	west
vatakku	Directional	north
weVrYku	Directional	south

Table 4.5: Adverbiais

4.1.3.5 Case

The second layer of inflection is Case. Generally most nouns exhibit two distinct case stems both in singular and plural. A noun in its nominative form, whether singular, or plural, does nor rake any suffix. (Ex. *maram: marafkaN*). The oblique form of nouns is the basis for all other cases.

There are three identifiable classes in case inflection, characterized by morphophonemic alternations exhibited either by the stem or suffix:

- Class 1: A majority of nouns rhar rerminate in */nY/*, or */m/*, lose their final consonants.
- Class 2: Nouns that terminate in */tu/*, or */rYu/*, geminate their final consonants.
- Class 3: Nouns other than 1 and 2, which do nor exhibit any variation in the stem.

Details of morphophonemic changes and allomorphy for case marking, follow in section 4.1.4. For details on Oblique bases of nouns refer Table 2.1

4.1.3.6 Number

A noun in singular does not take any explicit number suffix. ex. *vItu* 'house(sg.)'. Nouns in plural are inflected with */kaN/*. Nouns that terminate in long vowels have an allomorphic variant */kkaN/*. ex. *pU* 'flower', would be */pUkkaN/*, in the plural. Other nouns assume */kaN/* in rhe plural. ex. *vaNtu* 'beetle', would be *vaNtukaN*, in the plural. Theoretically, rhere are six major distinct classes identified, characterized by morphophonemic alternations exhibited either by the stem or suffix in the process of number inflection in nouns:

- Class 1: Nouns ending in */nY/*.
- Class 2: Nouns ending in */m/*.
- Class 3: Nouns ending in /// preceded by a short vowel.
- Class 4: Nouns ending in */N/* preceded by a long vowel.
- Class 5: Nouns that end in long vowels.
- Class 6: All other nouns that do not exhibit any change in plural formation.

Details of morphophonemic changes and allomorphy for number, follow in section 4.1.4

4.1.4 Nouns: Morphophonemics & Allomorphy

The process of suffixation effects certain phonological and morphophonemic changes on stems and suffixes. The following describes and accounts for such changes at each level of nominal inflection. It is interesting to note the emerging patterns of stem and suffix allomorphy.

Tamil noun morphology involves two numbers - the Singular and the Plural. Considering the phonological or morphophonemic changes both in noun stems and the number suffix(es), it can be observed that apart from the 20 stem types, and 1 suffix (for the plural), there remain 4 stem types and 1 suffix that exhibit allomorphic change.

The classes of stems that need to be analyzed when number suffix is stripped off are:

Class 10 - ***manYiwanY***- manYiwanY + *kalY* → *manYiwarkalY*
Rule: *r* → *nY* /_#
Class 11 - **maram** - maram + *kalY* → *marafkalY*
Rule: *f* →*m* /_#
Class 12 - **mulY** -*mulY* + *kalY* → *mutkalY*
Rule: *t* → *lY* /_#
Class 18 –***pul*** - pul + *kalY*→ *purYkalY*
Rule: *rY* → *l* /_#

The singular number remains 'unmarked', i.e., has a null suffix. The plural number is marked by the suffix *kalY*. The suffix *kalY* applies as the default rule for pluralization, except following stems that end in long vowels, in which context, the rule of plosive gemination applies, accommodating its allomorphic variant *kkalY*.

Tamil exhibits eight case relations - Nominative, Accusative, Dative, Locative, Sociative, Ablative, Benefactive and one adnominal relation marking the Genitive. Of the 23 noun classes, 5 stems exhibit allomorphic change. Although there are only eight case suffixes, case marking gets multiplied by nine, since phonological alternation realizes in nine instances of the classes of case suffixes, through the process of suffixation.

The classes of stems that need to be analyzed when case affixes are stripped off are:

Class 2 - ArYu - *ArYu* +*otu* →*ArYrYotu*
Rule: Ø → *u* /_
Class 9 - *kAtu* - *kAtu* +*otu* → *kAttotu*
Rule: Ø → *u* /_
Class 11 - **maram**→ ***maram*** +*otu* → *marawwotu*
Rule: *ww* →Ø/_[*V*]
Class 14 - narampu - *narampu* +*otu* —> *narampotu*
Rule: 0 → *u* /_
Class 21 - vaNtu - *vaNtu* +*otu*→ *vaNtotu*
Rule: 0 → *u* /_

The stems that need to be analyzed as when case marking is stripped off are:

Class 2 - *rY*- *ArYu* +*otu* →*ArYrYotu*
Rule: *rY* → **0** /*rY*_[*V*]
Class 3,4,6,20 – **y** – +*otu* → *eliyotu*
Rule: *y* → **0** /[*Vfi*]_[*V*]
Class 7 - N - *kaN* +*otu* → *kaNNotu*
Rule: *N* → 0 /*N*_[*V*]
Class 9 - *t* - *kAtu* +*otu* → **k***Attotu*
Rule: / → 0 /*t*_[*V*]
Class 11 - **ww** - ***maram*** +*otu* → *marawwotu*
Rule: *rY* → Ø /*rY*_[*V*]
Class 12 - ***lY*** – *mulY* +*otu* → *mulYlYotu*

Class 16 - **nY**– *poVnY* +*otu* → *poVnYnYotu*
Rule: *nY* → Ø / *nY*_[V]
Class 18 – **l** - *pul* +*otu* → *pullotu*
Rule: *l* → 0 / *l*_[V]
Class 20 - **v** – *pU*+*otu* → *pUvotu*
Rule: **p** → Ø / [V*bk*]_[V]

The choice of listing the plural suffix *kalY*, as the basic allomorph, with another allomorph *kkalY*, derived through morphophonemics, or as two distinct suffixes in the lexicon is a matter of convenience in implementation. Similarly, the case of listing just eight simple case suffixes, instead of the numerous case marker allomorphs, again is a matter of choice of the end-user, based on his relevant requirements.

An IA model would describe plurality as:
AnYukalY → *AnYu* + *kalY*
pUkkalY – *pU* + *kkalY*
or case-marking as:
AnYnYil → *AnY* + *nYil*
pUvil → *pU* + *vil*

However, an IP model would describe plural allomorphy as:
AnYukalY → *AnYu* + *kalY*
pUkkalY → *pU* + *kalY*
or case-marking as:
AnYnYil → *AnYu* + *il*
pUvil → *pU* + *il*

Although different models have different views on allomorphy, I wish to list here, for reasons of clarity, the plural markers with two distinct allomorphs - *kalY* and *kkalY*, and the various case suffixes with all their 72 distinct allomorphic forms.

23 Basic Stems	5 stem variants for case	5 stem variants for number	9 oblique markers	8 case suffixes	1 basic number suffix	1 number variant
AN	-	-	-	*Cases (1-8)	kalY	-
ArYu	ArY	-	rY	*Cases (1-8)	kalY	-
eVli	-	-	y	*Cases (1-8)	kalY	-
ilE	-	-	y	*Cases (1-8)	kalY	-
iwalYY	-	-	-	*Cases (1-8)	kalY	-
I	-	-	y	*Cases (1-8)	-	kkalY
kaN	-	-	N	*Cases (1-8)	kalY	-
kAl	-	-	-	*Cases (1-8)	kalY	-
kAtu	kAt	-	t	*Cases (1-8)	kalY	-
manYrwanY	-	manYrwar	-	*Cases (1-8)	kalY	-
maram	mara	maraf	ww	*Cases (1-8)	kalY	-
mulY	-	mut	lY	*Cases (1-8)	kalY	-
mAnY	-	-	-	*Cases (1-8)	kalY	-
narampu	naramp	-	-	*Cases (1-8)	kalY	-

nAy	-	-	-	*Cases (1-8)	kaIY	-
poVnY	-	-	nY	*Cases (1-8)	kaIY	-
poVy	-	-	y	*Cases (1-8)	kaIY	-
pul	-	purY	l	*Cases (1-8)	kaIY	-
poVrulY	-	poVrut	-	*Cases (1-8)	kaIY	-
pU	-	-	v	*Cases (1-8)	-	kkaIY
vaNtu	vaNt	-	-	*Cases (1-8)	kaIY	-
wer	-	-	-	*Cases (1-8)	kaIY	-
woIY	-	-	-	*Cases (1-8)	kaIY	-
* **Accusative** (*E*), **Dative** (*ukku*), **Sociative** (*otu/ɟtanY*), **Locative** (*il/itam*), **Instrumental** (*Al*), **Benefactive** (*ukkAka*), **Ablative** (*ilirunwu/ilumirunwu*), **Genitive** (*utEya/inY/anY*)						

Table 4.6: Total allomorphs for Nouns

The total number of resulting allomorphs would include 23 basic stems, 10 stem variants for number and case, and for a valid consideration of a true case suffix, the oblique marker suffix that realizes, as one of its 9 variants would have to further combine with one of the 8 different case suffixes. This would in fact, result in 72 suffix allomorphs for case marking alone. The total would then mean a sum of: 23 basic stems + 10 stem variants + 9 oblique markers (x 8 case suffixes) + 8 basic case suffixes + 1 basic number suffix + 1 number suffix variant = 115 allomorphs for nouns.

4.1.5 The Analyzer Chart for Nouns

The input to the Hybrid Tamil Morph would be a noun form that undergoes a series of morphemic strippings at each level of inflection as illustrated in the chart that follows.

The string is first scanned for a possible clitic at level 1. If found, it is stripped off by the 'Clitic Stripper' and stored in a temporary array with its relevant tag. The rest of the string is reconstructed and passed on to the next level of inflectional scan. Level 2 is that of Particle stripping. A similar processing takes place here, with the Particle being stripped off, tagged, and stored in a temporary array, the remaining string being reconstructed and passed on to the level 3 of Postpositions. This proceeds to level 4 of Adverbials, where an adverbial found is stripped away. Until after the level of adverbial extensions, case inflections remain.

Any of the eight cases that fall under either the Nominative or Oblique, is recognized, and the case marker stripped off by the 'Case Stripper'. The next level of number marking is tackled by the 'Number Stripper' that reconstructs the nominal base after number has been determined. The resulting string is declared as the root noun, with the rest of the remaining inflections and suffixes declared with their tags, as encountered at each level of the parse.

A comprehensive list of all nominal affixes is also provided alongside.

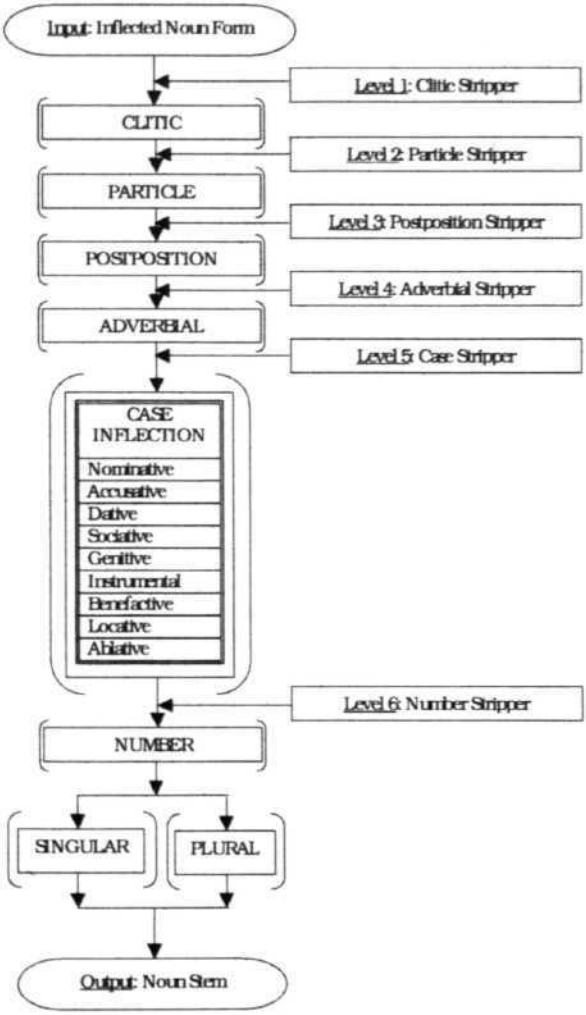


Figure 4.1(a): Morphological Analyzer Chart: Noun

Clitics:
Avawu, A, o, e, um, kUta, mattum, wAnY, Am

Particles after the Nominative:
mAwiri, pol, pola, ponYrYu, ponYrYa, eVnYrYu, eVnYrYa, eVnYum, eVnYa, eVnYpawu, eVnYappatuvawu

Particles after the Accusative:
wavira, vita, parYrYi

Postpositions after the Nominative:
mUlam, varE, illA, illAwa, illAwapowu

Postpositions after the Accusative:
kuriwwu, koVNtu, waviwwu, kAttilum, mattilum

Postpositions after the Dative:
Aka, uriya

Adverbials after the Accusative:
curYrYi,

Adverbials after the Dative:
pinY, pinYnYAl, pinwi, pinYpu, pirYaku, pirYpAtu, munY, munYnYAl, munwi, munYpu, appuram, appAl, atuwwa, itE, ulY, veVlYi, mel, kllYY, mawwi, natu, kurukke, aruke, ati, eVwir, ner, kilYYakku, merYku, vatakku, weVrYku

Adverbials after the Genitive:
kilYYakku, vatakku, weVrYku, merYku, pakkam, mel, kllYY

Case Inflections:
Ø, E, ukku/kku, inY(awu)/utEya, Al, utanY, il/itam, otu, ukkAka/kkAka, ilirunwu/itamirunwu

Number Inflections:
Ø, kalY/kkalY

Figure 4.1(b): List of Nominal Inflections/Suffixes

4.2 PRONOUNS

Pronouns normally inflect for categories of gender and case. Tamil permits three genders (Masculine, Feminine and Neuter), and eight cases (Nominative, Accusative, Dative, Sociative, Locative, Instrumental, Benefactive and Ablative and and one adnominal relation marking the Genitive).

4.2.1 Pronominal Classes

Pronouns are a group of irregular members of the class. The plural members of pronouns cannot be derived from their corresponding singulars, since the rules required are specific to each form and do not apply elsewhere, or to any other member. Strictly speaking, they have to be listed in the dictionary.

On the basis of allomorphy exhibited by pronouns when inflected for number and case fifteen distinct forms of pronouns are required in order to generate correct word forms. The following table illustrates the features of contrast:

Sl. No.	Pronoun form	Base Ending	Feature	Base1	Base2
1	avalY	alY	3fs	-	-
2	avanY	anY	3ms	-	-
3	avar	r	3hp	-	-
4	awu	wu	3ns	-	aw / aww
5	avE	vE	3np	-	avarYrY
6	nAnY	AnY	1s	eVnY	eVnYnY
7	nAfkalY	AfkalY	1p	eVfkalY	eVfkalY
8	nAm	Am	1pincl	nam	namm
9	nI	I	2s	unY	unYnY
10	nIfkalY	IfkalY	2p	ufkalY	ufkalY
11	nIr	Ir	2ph	um	umm
12	wAfkalY	AfkalY	2ph	wafkalY	wafkalY
13	wAm	Am	2ph	wam	wamm
14	wAnY	AnY	2s	wanY	wanYnY
15	yAm	Am	1sincl.	yam	yam

Table 4.7: Pronoun Classes

4.2.2 Levels Of Pronominal Extensions

Pronouns, like nouns have the same levels of inflectional categorizations:

Level 1: Clitics
Level 2: Particles
Level 3: Postpositions
Level 4: Advcrbials

(See Sections 4.1.3.1 (pg.50) to 4.1.3.4 (pg.53) for a list of pronominal inflections)

Clitics are morphosyntactic elements that may occur on a word form without any contrast to specifiy case inflections. Particles, Postpositions and Adverbials, occur only after the nominative, accusative, and the dative forms.

4.2.3 Analyzing Pronouns

Pronouns show a set of inflectional properties, very specific to them. Unlike nouns, pronouns inflect only for case and not for number, and follow the same patterning of inflection. (For details on pronominal cases refer Table 2.1 (pg.9)). For an account of how pronouns assume different stem bases in different case forms, refer Table 2.3 (pg. 12).

4.2.4 Pronouns: Morphophonemics & Allomorphy

Since Pronouns in Tamil do not seem to derive plurals from their corresponding singulars, the inflection at the level of number may be considered as absent or not existing.

Case suffixation in pronouns chiefly falls under three classes - the Nominative, Direct Oblique, and Indirect Oblique. The Accusative, Dative, Locative, Sociative, Ablative, Benefactive and the Genitive cases form a part of the Indirea Oblique. Of the 14 pronoun classes, 11 stems exhibit allomorphic change.

The classes of stems that undergo change for the Indirect Oblique case are:

Class 4 - **awu** - awu +*otu* → *awwotu*

Rule *w* → 0 /»•_#

Class 8 - nAm - ***nAm*** +*otu*→ *nammotu*

Rule: *am* → *A* / *n_m* + *otu*

Class 7 - nAfkalY –*nAfkalY* +*otu* →*eVfkalYotu*

Rule: *eV* → ***nA*** / *_fkalY* + ***otu***

Class 9 - nI- *nIfkalY* +*otu* →*unYnYotu*

Rule: *unYnY* →*nI* /_+ ***otu***

Class 10 - nIfkalY – *nIfkalY* +*otu*→ *ufkalYotu*

Rule: *u* →***nI*** / *_fkalY* + ***otu***

Class 11 - nIr *nIr* + ***otu*** → *ummotu*

Rule: *umm* → *nIr* /_ +*otu*

Class 12 - wAfkalY – *wAfkalY* +*otu*→ *wafkalYotu*

Rule: *a* →***A*** / *w_fkalY* + ***otu***

Class 13 - **wAm** - *wAm* +*otu* → *wammotu*

Rule: *am* → *A* *w_m* + ***otu***

Class 14 - wAnY –*wAnY* +*otu* →*wanYnYotu*

Rule: *anY* →***A*** / *w_nY* + ***otu***

Class 15 - yAm –*yAm* +*otu* → *yammotu*

Rule: ***am*** → ***Am*** / *y_m* + ***otu***

The chief rule that operates at the level of stem allomorphy is the Rule of lengthening, alternatively, intra-consonant insertion.

The kinds of change that the classes of case suffixes are affected by case marking are:

Class 4 — **w**— *awu* +*otu*→ *rnvwotu*

Class 8 - **m**— *nAm*+*ntu*→ *nammotu*

Class 14 - *nY- wAnY* +*otu*→ *wanYnYotu*

The rule of degemination operates in the instances of suffix alternations.

An IA model would describe case marking as:

eVnYnYitam→ *eVnY* + *nYitam*

nammitan→ *nam* + *nitam*

An IP model however, would describe case marking as:

e VnYnYitam→ *nAnY* + *it am*

nammitam → *nAm*+ *'itam*

Sl. No.	15 Basic Stems	12 stem variants for oblique	12 stem variants for case	2 oblique markers	8 case suffixes
1	avalY	-	-	-	*Cases (1-8)
2	avanY	-	-		*Cases (1-8)
3	avar	-	-		*Cases (1-8)
4	awu	aw	aw/aww	w	*Cases (1-8)
5	avE	avarYrY	avarYrY		*Cases (1-8)
6	nAnY	eVnY	eVnYnY	nY	*Cases (1-8)
7	nAfkalY	eVfkalY	eVfkalY		*Cases (1-8)
8	nAm	nam	namm	m	*Cases (1-8)
9	nI	unY	unYnY	nY	*Cases (1-8)
10	nIfkalY	ufkalY	ufkalY		*Cases (1-8)
11	nIr	um	umm	m	*Cases (1-8)
12	wAfkalY	wafkalY	wafkalY		*Cases (1-8)
13	wAm	wam	wamm	m	*Cases (1-8)
14	wAnY	wanY	wanYnY	nY	*Cases (1-8)
15	yAm	eVm	eVmm	m	*Cases (1-8)
* **Accusative** (*E*), **Dative** (*ukku*), **Sociative** (*otu/utanY*), **Locative** (*il/itam*), **Instrumental** (*Al*), **Benefactive** (*ukkAka*), **Ablative** (*ilirunnu/itamirunnu*), **Genitive** (*utEya/inY/anY*)					

Table 4.8: Total allomorphs for Pronouns

The total number of resulting allomorphs would include 15 basic stems, 12 oblique stems 12 stem variants for case suffixation, and for a valid consideration of a true case suffix, the oblique marker suffix that realizes, as one of its 3 variants would have to further combine with one of the 8 different case suffixes. The total would then mean a sum of: 15 basic stems + 12 oblique stems + 12 stem variants for case marking + 3 oblique markers (x 8 case suffixes) + 8 basic cases suffixes = 71 allomorphs for pronouns.

4.2.5 The Analyzer Chart for Pronouns

The input to the I lybrid Tamil Morph would be a pronoun form that undergoes a series of morphemic strippings at each level of inflection as illustrated in the chart that follows.

The string is first scanned for a possible clitic at level 1. If found, it is stripped off by the 'Clitic Stripper' and stored in a temporary array with its relevant tag. The rest of the string is reconstructed and passed on to the next level of inflectional scan. Level 2 is that of Particle stripping. A similar processing takes place here, with the Particle being stripped off, tagged, and stored in a temporary array, the remaining string being reconstructed and passed on to the level 3 of Postpositions. This proceeds to level 4 of Adverbials, where an adverbial found is stripped away. Until after the level of adverbial extensions, case inflections remain.

Any of the eight cases that fall under either the Nominative or Oblique, is recognized, and the case marker stripped off by the 'Case Stripper'. This reconstructs the pronominal base after case has been determined. The resulting string is declared as the stem pronoun, with the rest of the remaining inflections and suffixes declared with their tags, as encountered at each level of the parse.

A comprehensive list of all pronominal affixes is also provided alongside.

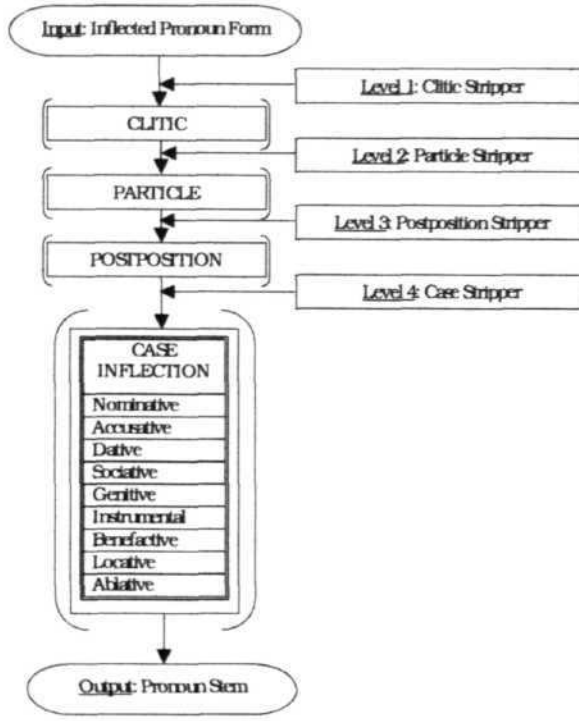


Figure 4.2(a): Morphological Analyzer Chart: Pronoun

Pronominal Inflections

Clitics:
Avawu, A, o, e, um, kUta, mattum, wAnY, Am

Particles after the Nominative:
mAwiri, pol, pola, ponYrYu, ponYrYa, eVnYrYu, eVnYrYa, eVnYum, eVnYa, eVnYpawu, eVnYappatuvawu

Particles after the Accusative:
wavira, vita, parYrYi

Postpositions after the Nominative:
mUlam, varE, illA, illAwa, illAwapowu

Postpositions after the Accusative:
kuriwwu, koVNtu, wavirwwu, kAttilum, mattilum

Postpositions after the Dative:
Aka, uriya

Case Inflections:
Ø, E, ukku/kku, inY(awu)/utEya, Al, utanY, il/itam, otu, ukkAka/kkAka, ilirunwu/itamirunwu

Figure 4.2(b): last of Pronominal Inflections/Suffixes

4.3 NUMERALS

Numerals normally inflect for the categories of number, gender and case. Tamil permits two numbers (Singular and Plural), (For details on number distinction refer section 2.3.1.1 (pg.7)), three grammatical genders (Masculine, Feminine and Neuter), and nine cases (Nominative, Accusative, Dative, Sociative, Genitive, Locative, Instrumental, Benefactive and Ablative) (For details on numeral base variation for case and ordinality, refer Table 2.5 (pg.13) and Table 2.7 (pg. 14)).

4.3.1 Numeral Classes

The following paradigm classes can be established for numerals:

Sl. No.	Numeral	Obl.1 (Particles)	Obl.2 (GNP Base)	Ordinal
1	oVnYrYu	oVnYrY	oVru	_Am/Avawu
2	iraNtu	iraNt	iru	_Am/Avawu
3	mUnYrYu	mUnYrY	mU	_Am/Avawu
4	nAnYku	nAnYk	nAl	_Am/Avawu
5	Enwu	Enw	E	_Am/Avawu
6	ArYu	ArY	arYu	_Am/Avawu
7	elYYu	elYY	eVIYYu	_Am/Avawu
8	eVttu	eVtt	eVN	_Am/Avawu
9	oVnYpawu	oVnYpaw	-	_Am/Avawu
10	pawwu	paww	-	_Am/Avawu
11	nUrYu	nUrYrY	-	_Am/Avawu
12	Ayiram	Ayira	-	Ayiraww
13	latcam	latca	-	latcaww
14	koti	koti	-	-

Table 4.9: Numeral Classes

4.3.2 Levels Of Numeral Extensions

A representative class, which falls under the category of nouns, numerals have an exclusive set of inflections specific to them, in addition to the set of nominal adverbials, postpositions and particles. Like nouns, they branch off inflectionally, at the primary level of Nominative vs. Oblique. The common levels are:

Level 1: Clirics
Level 2: Adverbials
Level 3: Particles
Level 4: Case

For the regular list of numeral inflections, see Sections 4.1.3.1 (pg.50) to 4.1.3.4 (pg.53). This apart, numerals extend their specific extensions to a set of Particles that assume the first kind of inflectional pattern. Whether they occur after Nominative, or Oblique forms, they are obligatory. Case, as in the case of nouns, as an inflectional form for numerals, is

obligatory, only if there are a series of adverbials that follow them. (For details on numeral cases refer Table 2.1 (pg.8)). Otherwise, they remain optional. Adverbials are a set of units that are optional and fall at the third level of inflection, only if caseal forms at the second level, precede it. Clitics are optional properties that may not, or may occur, after any particle. They are recursive to a certain degree.

4.3.3 Analyzing Numerals

Numerals in Tamil are of two types: Cardinals, and Ordinals. An analysis of numerals in Tamil would begin by stripping off at the morpho-syntactic level, Clitics, and at the purely morphological level, various semi-bound and bound Particles and Postpositional and/or Adverbial markers, down to primary inflectional markers that inflect for Case and then Number. After segmenting items of each level based on their order of occurrence, the noun stem may be obtained.

4.3.3.1 Particles, Postpositions And Other Suffixes

The chief inflections that suffix onto the oblique forms of all numerals are Particles, Postpositions, Adverbials and GNP endings. (For details on GNP suffixes in numerals refer Table 2.6 (pg.14), and Table 2.7 (pg.14) for GNP base variation in numerals). There are specific restrictions on what sort of base these suffixes can attach to. Some of these suffix to the nominative base alone, and certain others inflect for the oblique base alone.

In general, Particles are of two types: ones that suffix on to the oblique base, and others to the accusative base. Particles like *maNi* b'clock'. *riwam* 'kind', *muRYE* 'number of times', *wait* 'per head'. *wakE* 'type', follow the oblique base, and are applicable exclusively to Class 1 of the numeral paradigm. These sometimes are followed by adverbials. Most of these are quantitative or attributive particles. As in the case of nouns, Particles like *wavira. vita. polo, ponYYu, parYYi* attach to the accusative form of numerals. Most of these are relative particles.

Apart from these, there are two sets of Particles numerals specifically take. The first set consists of 4 Particles that can occur only after the oblique stem of class 1. They are as follows:

Particle1	Feature / Function Value	Example	Gloss
kAl	Conditional	*oVru kAlvaralAm*	He may come
cila	Quantitative1	*oVru cila puwwakafkalY*	A few books
cilar	Quantitative2	*oVru cilar pAtinYArkalY*	A few/some sang
cirYu	Quantitative3	*oVru cirYu velai*	A few odd jobs

The second set consists of the Particle *peVyar*, which can occur on the nominative stem of any class, excepting the first.

Particle2	Feature / Function Value	Example	Gloss
peVyar	Attributive	*iraNtu peVyar iruwwArkalY*	There were two people

Adverbials that follow particles need to be followed by the locative or dative base. The few of these adverbials arc: *vAkkil.alYavu. ulY. eVllAm.*

Postpositions like *kuriwwu, kAttilum, mattilum, wairruwu,* **and** *oVtti,* **inflect for the** accusative base, and are most often relative in nature.

Among the GNP suffixes, the 3rd.singular masculine and feminine suffixes, apply only to Class 1 of the numeral paradigm. The 3rd. singular honorific/ plural suffix, applies from Classes 1 to 8 of the numeral paradigm.

4.3.4 Numerals: Morphophonemics & Allomorphy

Numerals in Tamil inflect for number, case and sometimes, for gender and person. Considering the phonological or morphophonemic changes both in numeral stems and suffixes, it can be observed that apart from the 14 default stems, there remain 4 stems and 1 suffix that exhibit allomorphic change.

All of the classes of stems do inflect for number, however none of them undergo any morphophonemic change. This is so because the plural suffix *kaL* in numerals does not have any allomorphic variant.

Ordinality is expressed under the oblique case. Apocope is the general rule for stem allomorphy in the first eleven classes. The classes of stems that undergo change for case are:

Class 1 - oVnYrYu - *oVnYrYu +Am/Avaiu → oVnYrYAm/Avaiu*
Rule: *u* → **0** ***I_A***
Class 2 - iraNtu - *iraNtu +Am/Avaiu→ iraNtAm/Avaiu*
Rule: *u* → 0 */_A*
Class 3 - mUnYrYu- *mUnYrYu +Am/Avaiu →mUnYrYAm/Avaiu*
Rule: *u* → 0 *I_A*
Class 4 - nAnYku - *nAnYku +Am/Avaiu—> nAnYkAm/Avaiu*
Rule: *u* → 0 / *_A*
Class 5 - EnYwu - *EnYwu +Am/Avaiu→EnwAm/Avaiu*
Rule: * → 0 / *_A*
Class 6 - ArYu - *ArYAm/Avaiu → ArYu+Am/Avaiu*
Rule *u* → 0 *I_A*
Class 7 - elYYu - *elYYAm/Avaiu →* ***tVYu*** *+Am/Avaiu*
Rule: *u* → *Ø / _A*
Class 8 - eVrru - ***e*** *lVttAm/Avaiu →eVttu +Am/Avaiu*
Rule: *u* → 0 / *_A*
Class 9 - oVnYpawu- ***o*** *\ nYpawAm/Avaiu →****o*** *\ nYpawu +Am/Avaiu*
Rule: *u* → 0 *f_A*
Class 10 - pawwu — *pawuAm/Avaiu → pauuu +Am/Avaiu*
Rule: *u* → 0 *I_A*
Class 11 - nUrYu - *nUrYrYAm/Avaiu →nUrYu +Am/Avaiu*
Rule: *u* → 0 */_A*

Classes 12 and 13 involve a change of the final bilabial nasal to a geminated alveolar fricative, '*w*'.

Class 12 - Ayiram - *Ayirawwutan*L→ *Ayiram* + *utan*L
Rule: **w** → **m** / *_#*

Class 13 - **latcam** - *latcawwutanY→ latcam + utanY*
Rule: w → m / _ # (analysis)

Suffix allomorphy in the case of classes 12 and 13, would involve a morphophonemic insertion of the unit '*w*', prior to case suffixation.

Class 14 does not exhibit any allomorphy.

Complex morphophonemics are involved at the GNP level of inflection in numerals. The gender, number and person markers (GNP), that pronouns take on as suffixes are restricted to the first eight classes of the paradigm. Each of these classes involves distinct morphophonemic processes, peculiar to them alone. In consequence, no simple direct rule derivations are provided here. The classes of stems that undergo change for GNP marking are:

Class 1 can accommodate, the 3rd. person feminine, masculine, neuter or the honorific personal ending suffixes.

Class 1 - **oVnYrYu**- *oVru →oVnYrYu + var*

Classes 2 to 8 can take on only, the 3rd. person honorific suffix.

Class 2 - **iraNtu**- *iruvar →iraNtu + var*
Class 3 - **mUnYrYu**- *mUvar →mUnYrYu + var*
Class 4 - **nAnYku**- *nAlvar →nAnYku + var*
Class 5 - *EnYwu* - *Evar →EnYuu + tar*
Class 6 - **ArYu** - *aruvar → ArYu + var*
Class 7 - **elYYu** - *eVlYYuvar –elYYu + var*
Class 8 - **eVttu** - *eVNmar →eVttu +var*

Sl. No	14 Basic Stems	13 stem variants for case & ordinality	2 stem variants for number	8 stem variants for GNP*	3 oblique markers	8 case suffixes	2 ordinality suffixes	1 basic number suffix	1 number variant
1	oVnYrYu	oVnYrY	-	oVru	-	*Cases (1-8)	Am/Avawu	kalY	-
2	iraNtu	iraNt	-	iru	-	*Cases (1-8)	Am/Avawu	kalY	-
3	mUnYrYu	mUnYrY	-	mU	-	*Cases (1-8)	Am/Avawu	kalY	-
4	nAnYku	nAnYk	-	nAl	-	*Cases (1-8)	Am/Avawu	kalY	-
5	Enwu	Enw	-	E	-	*Cases (1-8)	Am/Avawu	kalY	-
6	ArYu	ArY	-	arYu	-	*Cases (1-8)	Am/Avawu	kalY	-
7	elYYu	elYY	-	eVlYYu	-	*Cases (1-8)	Am/Avawu	kalY	-
8	eVttu	eVtt	-	eVN	-	*Cases (1-8)	Am/Avawu	-	kkalY
9	oVnYpawu	oVnYpaw	-	-	-	*Cases (1-8)	Am/Avawu	kalY	-
10	pawwu	paww	-	-	-	*Cases (1-8)	Am/Avawu	kalY	kkalY
11	nUrYu	nUrY	-	-	rY	*Cases (1-8)	Am/Avawu	kalY	-
12	Ayiram	Ayira	Ayiraf	-	ww	*Cases (1-8)	wwu	kalY	-
13	latcam	latca	latcaf	-	ww	*Cases (1-8)	wwu	kalY	-
14	koti	-	-	-	-	*Cases (1-8)	-	kalY	-
*** Accusative** (*E*), **Dative** (*ukku*), **Sociative** (*otu/utanY*), **Locative** (*il/itam*), **Instrumental** (*Al*), **Benefactive** (*ukkAku*), **Ablative** (*ilirunwu/itamirunwu*), **Genitive** (*utEya/inY/anY*)									
***GNP suffixes 3sh** (*var*)* for all classes except class 8, **3sm** (*vanY*) & 3sf (*wwu*) for class1, **3sh** (*mar*)* for class 8									

Table 4.10: Total allomorphs for Numerals

The total number of resulting allomorphs would include 14 basic stems, 13 stem variants for case and ordinality, 2 stem variants for number, 8 stem variants for GNP marking, 2 oblique markers (x 8 case suffixes), 2 oblique markers (x 2 ordinality suffixes), 1 basic, and 1 variant allomorph for the plural number, 4 suffixes for gender, number and person. The total would then mean a sum of: 14 basic stems + 23 stem variants + 26 suffix variants = 63.

4.3.5 The Analyzer Chart for Numerals

The input to the 1 Iybrid Tamil Morph would be a numeral form that undergoes a series of morphemic strippings at each level of inflection as illustrated in the chart that follows.

The string is first scanned for a possible clitic at level 1. If found, it is stripped off by the 'Clitic Stripper' and stored in a temporary array with its relevant tag. The rest of the string is reconstructed and passed on to the next level of inflectional scan. Level 2 is that of Particle stripping. A similar processing takes place here, with the Particle being stripped off, tagged, and stored in a temporary array, the remaining string being reconstructed and passed on to the level 3 of Postpositions. This proceeds to level 4 of Adverbials, where an adverbial found is stripped away. Until after the level of adverbial extensions, case inflections remain.

Any of the eight cases that fall under either the Nominative or Oblique, is recognized, and the case marker stripped off by the 'Case Stripper'. The next level of number marking is tackled by the 'Number Stripper' that reconstructs the numeral base after the number has been determined. The resulting string is declared as the stem numeral, with the rest of the remaining inflections and suffixes declared with their tags, as encountered at each level of the parse.

A comprehensive list of all numeral affixes is also provided alongside.

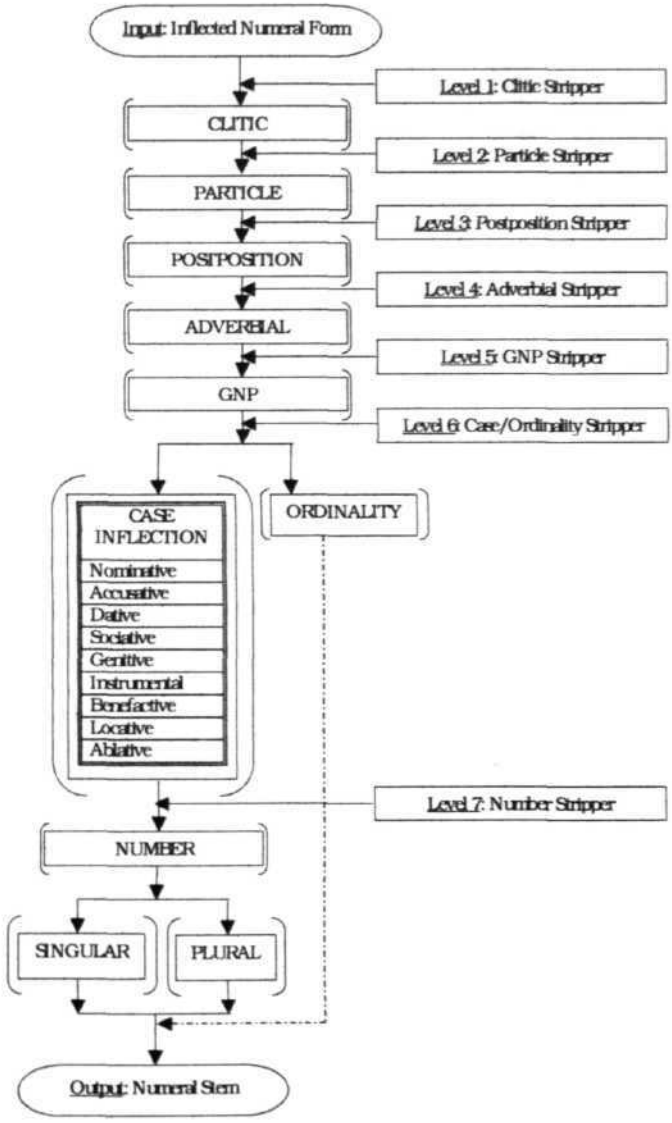


Figure 4.3(a): Morphological Analyzer Chart: Numeral

Numeral Inflections

Clitics:
Avawu, A, o, e, um, kUta, mattum, wAnY, Am

Particles after the Oblique:
maNi, viwam, murYE, kAl, cilar, cirYu, wale, vakE, peVyar, kAl, arYE, arYEkkAl, mukkAl

Particles after the Nominative:
mAwiri, pol, pola, ponYrYu, ponYrYa, eVnYrYu, eVnYrYa, eVnYum, eVnYa, eVnYpawu, eVnYappatuvawu,

Particles after the Accusative:
wavira, vita, parYrYi

Postpositions after the Accusative:
kuriwwu, koVNtu, wavirwwu, kAttilum, mattilum

Adverbials after the Locative/Dative:
alYavu, vAkku, ulY, eVllAm

GNP Inflections:
wwi, avanY, avar

Case Inflections:
Ø, E, ukku/kku, inY(awu)/utEya, Al, utanY, il/itam, otu, ukkAka/kkAka, ilirunwu/itamirunwu

Ordinality Inflection:
Am

Number Inflections:
Ø, kalY/kkalY

Figure 4.3{b): List of Numeral Inflections/Suffixes

Chapter 5

Verbs

5.1 VERBS

A verb form in Tamil may occur inflected for either Finite or Non-Finite. The basic distinction between the two is that finite verbs, which inflect for Tense, Aspect and Mood, arc always and immediately followed by Gender, Number and Person whereas non-finite verbal forms are not.

5.1.1 Verb Classes

Considering the variation exhibited by the verbs in inflection, the following distinctions in paradigms have been established. Based on the verb stem and suffix allomorphy a total of 24 classes of verbs have been distinguished. (See Table 5.1)

No.	Lexical entry - Imperative	Past Stem] - Past Suffix	Present Stem] - Present Suffix	Future Stem] - Future Suffix	Infinitive Stem] - Infinitive Suffix
1	Aku	A] nY	A] kirY	A] v	Ak] a
2	AlY	AN] t	AlY] kirY	AlY] v	AlY] a
3	alYYu	alYYu] w	AlYYu] kirY	alYYu] v	alYY] a
4	cA	ceV] ww	cA] kirY	cA] v	cA] ka
5	ceVl	ceVnY] rY	ceVl] kirY	ceVl] v	ceVl] la
6	ceVy	ceVy] w	ceVy]kirY	ceVy] v	ceVy]ya
7	coVl	coVnY] nY	coVl] kirY	coVl] v	coVl] la
8	eVnY	eVnY] rY	eVnY] kirY	eVnY] p	eVnY] a
9	ikalYY	ikalYY] nw	ikalYY] kirY	ikalYY] v	ikalYY] a
10	iru	iru] nw	iru] kkirY	iru] pp	iru] kka
11	kAN	kaN] t	kAN] kirY	kAN] p	kAN] a
12	kelY	ket] t	ket] kirY	ket] p	ket] ka
13	koVlY	koVN] t	koVlY] kirY	koVlY] v	koVlY] lYa
14	nil	ninY] rY	nirY] kirY	nirY] p	nirY] ka
15	no	noVnY] w	no] kirY	no] v	no] ka
16	pati	pati] ww	pati] kkirY	pati] pp	pati] kka
17	peVrYu	peVrY] rY	peVrYu] kirY	peVrYu] v	peVrY] a
18	po	po] nY	po] kirY	po] v	po] ka
19	potu	pot] t	potu] kirY	pot] v	pot] a
20	pUN	pUN] t	pUNu] kirY	pUNu] v	pUN] a
21	uN	uN] t	uN] kirY	uN] p	uN] Na
22	vA	va] nw	varu] kirY	varu] v	var] a
23	vilYYu	vilYYu] nw	vilYYu] kirY	vilYYu] v	vilYY] a
24	wUfku	wUfk] inY	wUfku] kirY	wUfku] v	wUfk] a

Table 5.1: Verb Classes

5.1.2 Levels Of Verbal Extensions

Finite verbs have the following levels of extensions:

Level 1: Tense non-finite inflections	(obligatory)	(Primary)
Level 2: Auxiliary Verb	(optional)	(Secondary)
Level 3: Gender, Number, Person	(obligatory)	(Secondary)
Level 4: Particle	(optional)	(Tertiary)
Level 5: Clitic	(optional)	(Tertiary)

The construction of a finite verb can be shown thus:
Verb + **Tense/Non-finite** inflection + Aux.Vb + **Gender,Number,Person** + Particle + Clitic

In the process of analysis, Clitics form the outermost layer of verbal analysis. They are optionally preceded by Particles. Particles follow the GNP suffixes at the third level of suffixation, if the verb stem is a finite form. The next level is occupied by Tense. Auxiliary verbs assume an optional layer between the stem and the Tense. These decompose into the verbal root.

A non-finite verb can be analyzed as:
Non-finite Verb + **Infl** (Tense) (+ Aux.Vb) + **Advl** + Particle + Clitic

5.1.3 Analyzing Verbs

A verb form in Tamil may occur inflected for either Finite or Non-Finite. The basic distinction between the two is that finite verbs, which inflect for Tense, Aspect and Mood are always and immediately followed by Gender, Number and Person, whereas non-finite verbal forms are not.

5.1.3.1 Clitics

Clitics of the following kind occur after finite as well as non-finite verb forms to realize various morphosyntactic functions as noted below. Vocative clitics are a list of addressives that denote the referent or an addressee. Vocative clitics show variations for number, and gender. Any of the following vocative clitics can be attached to any finite verb form. Vocative clitics, like grammatical function clitics, are optional. They follow the terminal layer.

Clitic	Feature / Function Value
+ um	Conjunctive
+ o	Disjunctive, Complementative, Dubitative
+ e	Emphatic2
+ wAnY	Emphatic1
+ A	Interrogative
+ mattum	Restrictive
+ kUta	Inclusive
+ Avawu	Minimal, Coordinative
+ Am	Suppositive
+ ata	Vocative/3rd. Singular, Masculine
+ atey	Vocative/3rd. Singular, Masculine, / 3rd. Plural, Human
+ atI	Vocative/3rd. Singular, Feminine

+ ayyA	Vocative/3rd. Singular, Human, Honorific, Masculine
+ ammA/mA	Vocative/3rd. Singular, Human, Honorific, Feminine
+ appA/pA	Vocative/3rd. Singular, Human, Honorific, Masculine
+ afka/ufka	Vocative/3rd. Plural, Human, Colloquial

Table 5.2 Clitics

5.1.3.2 Particles

Of the list of particles given below, there are selectional restrictions on the kind of particle chosen to place after a verb of a particular inflectional type. Particles of the following kind occur after finite as well as non-finite verb forms to realize various morphosyntactic functions as noted below.

Particle	Feature / Function Value
eVnpawu	Quotative1
eVnYrYu	Quotative2
eVnYrYa	Quotative3
eVnYa	Quotative4
eVnYrAl	Quotative-suppositional
mAwin	Comparative5
AnYAl	Suppositional

Table 5.3: Particles

Vb.Past + Particle

Particles that are attached directly to the past finite form of the verb.

Ex. avalY kAtrukku ponYAIY *el 'nYpawu* nijam

It's true that she did go to the forest

Vb.Present + Particle

Particles that are attached directly to the present finite form of the verb.

Ex. avalY ippolYYuwu camEkkirYAlY *el'nYrYA/* nAnY pokamAttenY

I won't leave, if she is cooking now.

Vb.Future+ Particle

Particles that are attached **directly** to the future finite form of the verb.

Ex. Acariyar eVnYnYE atippAro *el'nYa* nampukirYenY

I believe that the teacher would beat me.

Vb. Negative Past + Particle

Particles that are attached directly to the negative past finite form of the verb.

Ex. **avanY** pEyyE wirutavillE *eV'nYrY'a* nijam veVlYivanwawu

The truth that he did not steal the bag became obvious.

Vb.Negative Future + Particle

Particles that are attached directly to the negative finite form of the verb.

Ex. avanY pEyyE wirutamAttanY *el' nYrYu* nampufkalY

Believe that he would not steal the bag

Vb.Imperative+ Particle

Particles that suffix directly on to the imperative form of the verb.

Ex. 'ceVy', *eVnYrYu*coVnYnYenY

I said "Do it"

Vb.Hortative+ Particle

Particles that attach to the hortative form of the verb.

Ex. patikkalAm *AnYA*/puriyumA?

Let's read, but would we understand?

Vb.NegativeVbl.Prtpl + Particle

Particles that are attached directly to the negative form of the verbal participle.

Ex. kAwu ketkkAwa *mAwiri* natiwwAnY

He acted as if he was deaf

5.1.3.3 ADVERBIALS

Adverbials follow only the Adjectival participial forms of verbs. Adverbials 1 follow the Present, Past and Future forms, while Adverbials 2, follow the Negative adjectival participle.

Adverbials – 1			
Adverbial	**Feature / Function Value**	**Example**	**Gloss**
pinY	Temporal (fut)	ceVnYrYa pinY	After having gone
pirYaku	Temporal (fut)	ceVywa pirYaku	After doing
pirYpAtu	Temporal (fut)	coVnYnYa piyYpAtu	After having said
pinYpu	Temporal (fut)	cAppitta pinYpu	After eating
munYpu	Temporal (pst)	ceVyyum munYpu	Before doing
varE	Spatial	coVlkirYa varE	Until said
appoVlYYuwu	Temporal (indef)	ceVywa appoVlYYuwu	When it was done
appuram	Temporal (indef)	cAppitta appuram	After having eaten
utanY	Temporal (indef)	ceVywa utanY	As soon as it was done

Table 5.4(a): Adverbials

Adverbials – 2			
Particle	**Feature / Function Value**	**Example**	**Gloss**
varE	Spatial	coVllAwa varE	Not until said
appoVlYYuwu	Temporal (indef)	ceVyyAwa appoVlYYuwu	When it was not done

Table 5.4<b): Adverbials

5.1.3.4 AUXILIARY VERBS

An Auxiliary verb is that which attaches to another verb, imparting an extensible meaning to the verbal phrase as a whole. As indicative of their verbal function, they are identifiably restricted to the category of verbs. Verbal extensions involving auxiliary verbs are possible

only in case the main verb is inflected for the infinitive, or a verbal participle. Auxiliary verbs, when attached to a verb stem, indicate various functions such as Aspect, Modality, and Voice.

In a sequence of one or more verbs, the functional head of the verb phrase lends itself to both finite and non-finite morphological inflections. The lexical head remains inert. The two together behave as a single morphosyntactic unit. In literature, verbs other than the main verbs are termed as light verbs, vectors, explicators and auxiliaries. Such verbs are bleached of their lexical sense. They are a group of secondary verbs that "bring changes in the valence, voice and certain aspects of the viewpoint of the action denoted by the main verb" (Uma Maheshwara Rao 2002, Annamalai & Steever 1998, Hook 1974, Subbarao).

Annamalai & Steever (1998) define the role of auxiliary compound verbs as conveying "grammatical categories that are not expressed by any simple verbal inflection of the language."

Accordingly, explicators and auxiliaries occur on any of the following types of verb structures:

1) Causative Verbs: V]caus (ex: vE, coVl)
2) Intranstive Verbs: V]intr (+ sudden change of state) (ex: utE, viri)
3) Intranstive Verbs: V]intr (- sudden change of state) (ex: karugu, koVwi)

The Auxiliaries can be grouped into 2 different classes based on their distribution and function.

5.1.3.4.1 Auxiliary Verb Class 1 (AuxVbl)

'rhcrc are 13 auxiliary verbs in this class. These occur on the infinitival form of the verb. It can occur with both transitive and intransitive verbs.

Auxiliary Verb	Feature Value	Function Value	Example: Vb + Inf + Aux	Gloss
vE	Direct Causative	Valence	*awE wUfka vE*	make s'one/thing sleep
koVtu	Completive	Valence	*cAppita koVtu*	give s'one/thing to eat
coVl	Indir. Causative	Valence	*peca coVl*	ask s'one/thing to talk
potu	Completive	Valence	*woykka potu*	put s'thing to be washed
po	Inceptive	Valence	*cAppita po*	about to eat
patu	Passive	Voice	*atikka pattawu*	was being beaten
vitu	Permissive	Deontic	*patikka vitu*	allow s'one/thing to read
mutiyum	Abilitative	Deontic	*ceVyya mutiyum*	I can do
illE	Negative	Defective Verb	*wUfkavillE*	did not sleep
kUtAwu	Prohibitive1	Defective Verb	*cirYikka kUtAwu*	should not laugh
veNtAm	Prohibitive2	Defective Verb	*poka veNtAm*	need not go
veNtum	Necessitative	Defective Verb	*poka veNtum*	should go
avaciyam illE	Prohibitive3	Defective Verb	*avaciyam illE*	not necessary

Table 5.5(a): Auxiliary Verbs 1

5.1.3.4.2 Auxiliary Verb Class 2 (AuxVb2)

There arc 10 auxiliary verbs in this class. These occur on the positive verbal participial form of a verb. It can occur with both transitive and intransitive verbs.

Auxiliary Verb	Feature Value	Function Value	Example: Vb + Vb.Ppl + Aux	Gloss
potu	Completive	Viewpoint	*woywwu potu*	finish washing
po	Completive	Viewpoint	*kurEnwu po*	lessen/decrease
vE	Beneficial	Viewpoint	*camEwwu vE*	keep s'thing cooked
wlr	Certaintive	Viewpoint	*ceVywe wlruvenY*	(at any cost) I'll do it !
muti	Completive	Viewpoint	*cAppittu muti*	finish eating
woVlE	Contemptive	Viewpoint	*paNNi woVlE*	(for heaven's sake)do it!
pAr	Attemptive	Viewpoint	*avanYitam peci pAr*	try talking to him
koVlY	Reflexive	Viewpoint	*nlye ceVywu koVlY*	do it yourself
walYlY'u	Intensive	Viewpoint	*eVlYYuvi walYlY'inYAlY*	she went on writing
AyirYrY'u	Completive	Defective Verb	*ceVywu AyirYrY'u*	has been finished

Table 5.5(b): Auxiliary Verbs 2

5.1.4 FINITE & NON-FINITE VERB FORMS

5.1.4.1 FINITE VERB FORMS

There are ten distinct finite verb forms in Tamil. Five of these have tense markers followed by a full set of GNP suffixes, while the rest have selectional restrictions in the choice of GNP suffixes.

5.1.4.1.1 GENDER, NUMBER AND PERSON

As part of gender, number and person inflections on verbs (features of finite verb agreement), four distinct classes of GNP suffix sets are found, characteristic of a particular set of finite inflections:

Class	Functional Category	Feature Value (GNP)	Example (v+fc+fv)	Gloss
1	Imperative	Singular - ∅	*wUfku*	Sleep
		Plural – fkalY	*wUfkufkalY*	Sleep (hon.)
2	Negative Future	1sa – enY	*wUfkamAttenY*	I will not sleep
		1pa – om	*wUfkamAttom*	We will not sleep
		2sa – Ay	*wUfkamAttAy*	You will not sleep
		3sm – AnY	*wUfkamAttAnY*	He will not sleep
		3sf – AlY	*wUfkamAttAlY*	She will not sleep
		3sh – Ar	*wUfkamAttAr*	He/She (hon.) will not sleep
		3p – ArkalY	*wUfkamAttArkalY*	They will not sleep
3	Prohibitive	2s – e	*wUfkAwe*	Don't sleep
		2ph – IrkalY	*wUfkinYIrkalY*	You (hon.) slept
4	Past, Present, Future	1sa – enY	*wUfkinYenY*	I slept
		1pa – om	*wUfkinYom*	We slept

		2sa – Ay	*wUfkinŸAy*	You slept
		2pa– IrkalY/elY/fka	*wUfkinŸIrkalŸ*	You (hon.) slept
		3sm – AnY	*wUfkinŸAnŸ*	He slept
		3sf – AlY	*wUfkinŸAlŸ*	She slept
		3sn – awu/um	*wUfkiyawu/wUfkum*	It slept
		3pn – anYa	*wUfkinŸa*	They slept
		3h – Ar	*wUfkinŸAr*	He/She (hon.) slept
		3ph – ArkalY	*wUfkinŸArkalŸ*	They slept

Table 5.6: GNP classes for Verbs

5.1.4.1.2 TENSE, ASPECT, MODALITY

5.1.4.1.2.1 PAST

Depending on the conjugational class of the verb, the past tense suffix exhibits the allomorphs: *[nŸ], ft], [w], [ww], [rŸ], [nw], [inŸ].* Verbs are classified as eighteen types, based on the variations exhibited by verb stem before the past tense inflection. The following is a list of how verbs decline for the past tense.

Verbal stem + **Past tense**

Examples:

Sl.No.	Class	Lexical Meaning	Inflected Form	Gloss
1	*Aku*	become	*A+nŸ+enŸ*	I became
2	*AlŸ*	rule	*AN+t+enŸ*	I ruled
3	*alŸŸu*	cry	*alŸŸu+w+enŸ*	I cried
4	*cA*	die	*cV+ww+enŸ*	I died
5	*cV7*	go	*cV+nŸ+rŸ+enŸ*	I went
3	*cVy*	do	*cVy+w+enŸ*	I did
6	*cvV7*	say	*cvV+nŸ+nŸ+enŸ*	I said
7	*eVnŸ*	think	*eV+nŸ+rŸ+enŸ*	I thought
8	*ikalŸŸ*	disparage	*ikalŸŸ+nw+enŸ*	I disparaged
8	*iru*	be	*iru+nw+enŸ*	I had been
9	*kAN*	see	*kaN+t+enŸ*	I saw
10	*kelŸ*	listen	*kel+t+enŸ*	I listened
2	*koVlŸ*	hold	*koVN+t+enŸ*	I held
5	*nil*	stand	*inŸ+rŸ+enŸ*	I stood
11	*no*	pain	*noV+nw+enŸ*	I was pained
12	*pati*	read	*pati+ww+enŸ*	I read
13	*peVrŸu*	get	*peVrŸ+rŸ+enŸ*	I got
14	*po*	go	*po+nŸ+enŸ*	I left / went
15	*potu*	drop	*pot+t+enŸ*	I dropped
16	*pUN*	wear	*pUN+t+enŸ*	I wore
16	*uN*	eat	*uN+t+enŸ*	I ate
17	*vA*	come	*va+nw+enŸ*	I came
8	*vilŸŸu*	fall	*vilŸŸu+nw+enŸ*	I fell
18	*wUfku*	sleep	*wUfk+inŸ+enŸ*	I slept

5.1.4.1.2.2 PRESENT

The present and present continuous tense are indicated by the suffix */kirŸ/* or by its allomorphic variant *[kekirŸ]*. Verbs when inflected for the present continuous tense exhibit seven classes of stem variation before the suffix. The following is a list of how verbs decline for the present continuous tense.

Verbal stem + Present tense

Examples:

Sl.No.	Class	Lexical Meaning	Inflected Form	Gloss
1	*Aku*	become	*A+kirŸ+enŸ*	I am becoming
2	*AÑ*	rule	*AÑ+kirŸ+enŸ*	I am ruling
2	*aÑŸu*	cry	*aÑŸu+kirŸ+enŸ*	I am crying
2	*cA*	die	*cA+kirŸ+enŸ*	I am dying
2	*cVl*	go	*cVl+kirŸ+enŸ*	I am going
2	*cVy*	do	*cVy+kirŸ+enŸ*	I am doing
2	*coVl*	say	*coVl+kirŸ+enŸ*	I am saying
2	*eVnŸ*	think	*eVnŸ+kirŸ+enŸ*	I am thinking
2	*ikaÑŸ*	disparage	*ikaÑŸ+kirŸ+enŸ*	I am disparaging
3	*iru*	be	*iru+kkirŸ+enŸ*	I am being
2	*kAN*	see	*kaN+kirŸ+enŸ*	I am seeing
4	*keÑ*	listen	*ket+kirŸ+enŸ*	I am listening
2	*koVÑ*	hold	*koVÑ+kirŸ+enŸ*	I am holding
5	*nil*	stand	*nirŸ+kirŸ+enŸ*	I am standing
2	*no*	pain	*no+kirŸ+enŸ*	I am paining
3	*pati*	read	*pati+kkirŸ+enŸ*	I am reading
2	*peVrŸu*	get	*peVrŸu+kirŸ+enŸ*	I am getting
2	*po*	go	*po+kirŸ+enŸ*	I am leaving/going
2	*potu*	drop	*potu+kirŸ+enŸ*	I am dropping
6	*pUN*	wear	*pUNu+kirŸ+enŸ*	I am wearing
2	*uN*	eat	*uN+kirŸ+enŸ*	I am eating
7	*vA*	come	*varu+kirŸ+enŸ*	I am coming
2	*vÑŸu*	fall	*vÑŸu+kirŸ+enŸ*	I am falling
2	*wUfku*	sleep	*wUfku+kirŸ+enŸ*	I am sleeping

5.1.4.1.2.3 FUTURE

Unlike in the past or in the present tense inflections, verb stems in the future exhibit less variation. However, the tense marker itself has three allomorphs determined by the corresponding verb stems, as: *[v] [p]* ***[pp].*** There are totally nine classes of verb stem variation before the future tense inflection. The following is a list of how verbs decline for the future tense.

Verbal stem + **Future tense**

Examples:

Sl.No.	Class	Lexical Meaning	Inflected Form	Gloss
1	*Aku*	become	*A+v+enŸ*	I will become
2	*AÑ*	rule	*AÑ+v+enŸ*	I will rule
2	*aÑŸu*	cry	*aÑŸu+v+enŸ*	I will cry
2	*cA*	die	*cA+v+enŸ*	I will die
2	*cVl*	go	*cVl+v+enŸ*	I will go
2	*cVy*	do	*cVy+v+enŸ*	I will do
2	*coVl*	say	*coVl+v+enŸ*	I will say

3	*eVnY*	think	*eVnY+p+enY*	I will think
2	*ikalYY*	disparage	*ikalYY+v+enY*	I will disparage
4	*iru*	be	*iru+pp+enY*	I will be
5	*kAN*	see	*kaN+p+enY*	I will see
6	*kelY*	listen	*ket+p+enY*	I will listen
2	*koVlY*	hold	*koVlY+v+enY*	I will hold
7	*nil*	stand	*nirY+p+enY*	I will stand
2	*no*	pain	*no+v+enY*	I will pain
4	*pati*	read	*pati+pp+enY*	I will read
2	*peVrY'u*	get	*peVrY'u+v+enY*	I will get
2	*po*	go	*po+v+enY*	I will leave /go
2	*potu*	drop	*potu+v+enY*	I will drop
8	*pUN*	wear	*pUNu+v+enY*	I will wear
5	*uN*	eat	*uN+p+enY*	I will eat
9	*vA*	come	*Varu+v+enY*	I will come
2	*vilYu*	fall	*vilYu+v+enY*	I will fall
2	*wUfku*	sleep	*wUfku+v+enY*	I will sleep

5.1.4.1.2.4 NEGATIVE PAST

The negative past form of a finite verb is indicated by attaching the marker *illE.* on the infinitival base of the verb. There are no distinct gender, number or person indicators. I lowever, the ending indicates a neutralized GNP.

Verbal stem + Infinitive base + *illE*

Examples:

nAnY wUfkanillE	**I did not sleep**
nAfkalY 'wUfkanillE	**We** did **not sleep**
nI wUfkanillE	**You** did **not sleep**
nIfkalY 'wUfkanillE	**You** (p/h) **did not sleep**
avanY wUfkanillE	**He** did **not sleep**
avalY wUfkanillE	**She did not sleep**
avar wUfkanillE	**He/She (h)** did **not sleep**
avarkalY ***ml*** *fkanillE*	They did **not sleep**
avu wUfkanillE	**It** did **not sleep**

5.1.4.1.2.5 NEGATIVE FUTURE

The negative future form of a finite verb is expressed by attaching the marker *mAtt.* on the infinitival base of the verb, followed by the relevant GNP suffix.

Verbal stem + Infinitive base + mAtt + GNP

Examples:

nA nY cAppitamA ttenY	**I will not eat**
nAfkalY cAppitamA ttom	We **will not eat**
ml *cAppitamA ttAy*	**You** will **not eat**
nIfkalY cAppitamA ttIrkalY	You (p/h) will not **eat**
mail' *cAppitamA ttA nY*	**He will not eat**
avalY cAppitamA ttAlY	**She will not eat**
mar cAppitamA ttAr	He/She (h) will not eat
avarkalY cAppitamA ***ttA*** *rkalY*	**They** will **not eat**

5.1.4.1.2.6 IMPERATIVE

The imperative stem is often identical to the root form of the verb. There is no explicit inflectional increment that is exhibited by the imperative word form. In the imperative, plural number is inflected for the plural suffix.

Verbal stem + Imperative marker[1]

Examples:

wUfku	Sleep (s)
wUfku +ufkalY	**Sleep** (p/h)

5.1.4.1.2.7 PROHIBITIVE

The negative imperative form that also functions as the prohibitive is marked by the inflection *Aw*, followed by the second person suffix, in the singular */e/*, and in the plural */IrkalY/*.The verb stem which ends in a vowel, loses it, before the prohibitive suffix.

Verbal stem + Infinitive base + *Aw* + 2nd.GNP

Examples:

wUf+Aw+e	Do not sleep (s)
wUfk+Aw+IrkalY	Do not sleep (p/h)
cAppit+Aw+e	Do not eat (s)
cAppit+Aw+IrkalY	**Do not eat (p/h)**

5.1.4.1.2.8 ADMONITIVE

The suffix that marks the admonitive form of the verb is the suffix *a*[2], adds on to the infinitival base of the verb. Admonitives function as expletives.

Verbal stem + Infinitive base + a

Example:

avanY nAcamApok +a	Fie upon him!
urn}' vltu pAlYAk+a May TOUT house be destroyed!	

5.1.4.1.2.9 HORTATIVE

The verbal form that functions as the hortative is derived from the infinitival form of the verb and adding the suffix *lAm* to it.

Verbal stem + Infinitive base + /Am

Example:

wUfkalAm	Let us sleep
cAppitalAm	**Let us eat**

5.1.4.2 NON-FINITE VERB FORMS

Non-finite verb forms are usually known as verb forms without agreement marking, such as gender, number and person. A non-finite verb form at the tertiary level is inflected for verbal participles, adjectival participles, conditionals, and infinitivals. These non-finite verbal

---

[1] The Imperative marker is always a zero morph in Tamil.

[2] Homophonous with the Infinitive suffix

participles and infinitives are a great source for the derivation of complex, compound verbal forms by auxiliation (Steever 1987).

5.1.4.2.1 PARTICPLES

Participles are of two types: Adjectival and Verbal.

5.1.4.2.1.1 Adjectival Particples

Adjectival participial forms are formed by the inflection of the suffixes similar to the past, and present, followed by rhe suffix *a.*
Example: Past Adjectival Participle

cAppitta that which has been eaten

Example: Present Adjectival Participle

cAppitukirYa that which is eating

However the adjectival participial forms indicative of the habitual aspect are derived differently by adding *um.*
Example: Habitual Participle

cAppitum that which will eat

Adjectival participles also have negative forms realized by suffixing *Awa,* to the verb stem.
Kxample: Negative Adjectival Participle

cAppitAwa that which has not been eaten

5.1.4.2.1.2 Verbal Participles

Verbal participles, that are tenseless, express two semantic features: Positivity, and Negativity. They indicate the accomplishment or the non- accomplishment of an action or event, indicated by the verb. Positive verbal participles are formed by the suffixation of the markers *uu,* and its various allomorphs *uu, tu, rYu, nYu* and *i.*
Examples: Positive Verbal Participle

wufk+i having slept
cAppit+tu having heard

Negative verbal participles are obtained by suffixing *Amal,* to the verb base.
Examples: Negative Verbal Participle

wufk + Amal not having slept
cAppit + Amal not having eaten

5.1.4.2.2 CONDITIONALS

Conditionals are of three types: Positive, Negative and, Durative.

5.1.4.2.2.1 Positive Conditionals

The Positive conditional is formed by the suffixation of *A/*, to the past verb stem.
Examples: Positive Conditional

wUfkeiñYA/	if **you sleep**
cAppittA/	if **you eat**

5.1.4.2.2.2 Negative Conditionals

Negative conditional is formed by the suffixation of the negative conditional marker *AvittA/* to the infinitival form of the verbal stem.
Examples: Negative Conditional

wUfkAvittA/	if you do not sleep
cAppiIAvittA/	if you do not eat

5.1.4.2.2.3 Durative Conditionals

Durative conditionals may be realized by the attachment of the auxiliary complex *koVNtiru* on the past verb base followed by the conditional suffix *AL*
Examples: Durative Conditional

wUfkikkoVNtirunwA/	**Had I been sleeping**
cAppittukkoVNtirunwA/	**Had I been eating**

5.1.4.23 INFINITIVES

Infinitival verb forms are a tenseless class of non-finite verb forms. The infinitive of a verb is obtained by suffixing the marker *a*, to the verbal base. Verb stems when inflected for the infinitive exhibit stem allomorphy which involve doubling of the stem final consonants when preceded by a short vowel, besides many other idiosyncrasies as shown below. There are totally eleven classes of verb stem variation before the future tense inflection. The following is a list of how verbs decline for the infinitive.
Verbal stem + **Infinitival** Base
Examples:

Sl.No.	Class	Lexical Meaning	Inflected Form	Gloss
1	*Aku*	become	*Ak+a*	to become
2	*AñY*	rule	*AñY+a*	to rule
1	*añYu*	cry	*añYY+a*	to cry
3	*cA*	die	*cA+ka*	to die
4	*ceVl*	go	*ceVl+la*	to go
5	*ceVy*	do	*ceVy+ya*	to do
4	*coVl*	say	*coVl+la*	to say
2	*eVñY*	think	*eVñY+a*	to think
2	*ikuñYY*	disparage	*ikuñYY+a*	to disparage
6	*iru*	be	*iru+kka*	to be
2	*kAN*	see	*kAN+a*	to see
7	*keñY*	listen	*ket+ka*	to listen

8	*koV̈Ṉ*	hold	*koV̈Ṉ+ṈY*	to hold
9	*nil*	stand	*nirY+ka*	to stand
3	*no*	pain	*no+ka*	to pain
6	*pati*	read	*pati+kka*	to read
1	*peVṟY̌u*	get	*peVṟY+a*	to get
3	*po*	go	*po+ka*	to leave / go
1	*potu*	drop	*pot+a*	to drop
2	*pUN*	wear	*PUN+a*	to wear
10	*uN*	eat	*uN+Na*	to eat
11	*vA*	come	*var+a*	to come
1	*viṈY̌u*	fall	*viṈY+a*	to fall
1	*vUfku*	sleep	*vUfk+a*	to sleep

5.1.5 VERBS: MORPHOPHONEMICS & ALLOMORPHY

Verbs in Tamil are broadly classified as - the Finite and the Non-finite. Finite verb forms inflect for Tense and GNP.

The Non-Finite verb forms form bases for a variety of Aspectual and Modal forms. Structurally elaborating, non-finite forms fall under three large categories - the Infinitive, the Participles, and the Conditionals. The Infinitive form, one of the chief classifications, in the non-finite group, assumes the base for many non-finite inflections to realize. Participles branch into the Adjectival and the Verbal participles. The adjectival participle constitutes the Past, Present, I labitual and the Negative forms. The verbal participle constitutes the Positive and the Negative forms. Conditionals branch into the Positive, Negative and the Durative forms. The durative further ramifies into the Past and the Non-Past.

With regard to the morphophonemic changes that the verbs exhibit before various suffixes the following 24 types are illustrated with examples in what follows.

The past tense records 14 stem variants and 7 suffix variants:

Class 1 - **Aku** - *AnY* → *A+ nY*
Rule: No direct P-rule or MP rule applies (analysis)

Class 2 - **AlY** – *ANt* → ***AN*** + *t*
Rule: N → *ft'* /_# (analysis)

Class 4 - *cA* - *ceVnw* → *ceV* + *nw*
Rule: *eV* → *A*/_# (analysis)

Class 5 - **ceVl** – *ceVnYṟY* → *ceVnY* + *ṟY*
Rule: *nY* → //_# (analysis)

Class 7 - **coVl** – *coV̈nYnY* →*coVnY* + *nY*
Rule: *nY* → *l* /_#(analysis)

Class 11 - **fcAN** - *kaNt* → *kaN* + *t*
Rule: *a* → *A* /_N# (analysis)

Class 12 – **kelY** -*kett* → *ket* + /
Rule *t* → *ṈY*/_# (analysis)

Class 13 - **koVlY** – *koVNt* → *koVN* +***i***
Rule: N → *ṈY*/_# (analysis)

Class 14 - ***nil*** - *minYṟY* → *minY* + *ṟY*
Rule: *nY* →//_# (analysis)

Class 15 - *no* — *noVnw* → *noVn* + *w*

Rule: *oV* → *o* / _# (analysis)

Class 17 - **peVrYu** - *peVrYrY* → *peVrY* + *rY*

Rule: *rY* —> *u* / _# (analysis)

Class 19 - *potu* - *pott* → *pot* + *t*

Rule: *t* → *u* / _# (analysis)

Class 22 - vA - *vanw* → *va* + *nv*

Rule: *a* —> *A* / _*n*# (analysis)

Class 24 - **wUfku** - *wUfkinY* → *wUfk* + *inY*

Rule: *inY* → *u* / _# (analysis)

7 suffix allomorphic variants exist.

Sl No	24 Basic Stems	14 stem variants for Past	5 stem variants for Present	5 stem variants for Future	9 stem variants for the Non-finite	7 Past tense suffix marker variants	2 Present tense suffix marker variants	3 Future tense suffix marker variants	9 stem variants for Infinitive	9 Non-finite based suffix variants	4 Past tense based suffix variants	1 Present tense based suffix variants
1	Aku	AnY	A	A	Ak	nY	kirY	v	a	+ *NF forms (1-9)	nY + *Pt. forms (1-4)	kirY+ *Pr. form
2	AlY	AN	-	-	-	t	kirY	v	a	+ *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
3	alYYu	-	-	-	alYY	w	kirY	v	a	+ *NF forms (1-9)	w + *Pt. forms (1-4)	kirY+ *Pr. form
4	cA	ceV	-	-	-	ww	kirY	v	ka	k + *NF forms (1-9)	ww + *Pt. forms (1-4)	kirY+ *Pr. form
5	ceVl	ceVnY	-	-	-	rY	kirY	v	la	l + *NF forms (1-9)	rY + *Pt. forms (1-4)	kirY+ *Pr. form
6	ceVy	-	-	-	-	w	kirY	v	ya	y + *NF forms (1-9)	w + *Pt. forms (1-4)	kirY+ *Pr. form
7	coVl	coVnY	-	-	-	nY	kirY	v	la	l + *NF forms (1-9)	nY + *Pt. forms (1-4)	kirY+ *Pr. form
8	eVnY	-	-	-	-	rY	kirY	p	a	+ *NF forms (1-9)	rY + *Pt. forms (1-4)	kirY+ *Pr. form
9	ikalYY	-	-	-	-	nw	kirY	v	a	+ *NF forms (1-9)	nw + *Pt. forms (1-4)	kirY+ *Pr. form
10	iru	-	-	-	-	nw	kkirY	pp	kka	kk + *NF forms (1-9)	nw + *Pt. forms (1-4)	kkirY+ *Pr. form
11	kAN	kaN	-	-	-	t	kirY	p	a	+ *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
12	kelY	ket	ket	ket	ket	t	kirY	p	ka	k + *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
13	koVlY	koVN	-	-	-	t	kirY	v	lYa	lY + *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
14	nil	ninY	nirY	nirY	nirY	rY	kirY	p	ka	k + *NF forms (1-9)	rY + *Pt. forms (1-4)	kirY+ *Pr. form
15	no	noV	-	-	-	nw	kirY	v	ka	k + *NF forms (1-9)	nw + *Pt. forms (1-4)	kirY+ *Pr. form
16	pati	-	-	-	-	ww	kkirY	pp	kka	kk + *NF forms (1-9)	ww + *Pt. forms (1-4)	kkirY+ *Pr. form
17	peVrYu	peVrY	-	-	peVrY	rY	kirY	v	a	+ *NF forms (1-9)	rY + *Pt. forms (1-4)	kirY+ *Pr. form
18	po	-	-	-	-	nY	kirY	v	ka	k + *NF forms (1-9)	nY + *Pt. forms (1-4)	kirY+ *Pr. form
19	potu	pot	-	-	pot	t	kirY	v	a	+ *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
20	pUN	-	pUNu	pUNu	-	t	kirY	v	a	+ *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
21	uN	-	-	-	-	t	kirY	p	Na	N + *NF forms (1-9)	t + *Pt. forms (1-4)	kirY+ *Pr. form
22	vA	va	varu	varu	var	nw	kirY	v	a	+ *NF forms (1-9)	nw + *Pt. forms (1-4)	kirY+ *Pr. form
23	vilYYu	-	-	-	vilYY	nw	kirY	v	a	+ *NF forms (1-9)	nw + *Pt. forms (1-4)	kirY+ *Pr. form
24	wUfku	wUfk	-	-	wUfk	inY	kirY	v	a	+ *NF forms (1-9)	inY + *Pt. forms (1-4)	kirY+ *Pr. form

Table 5.7: Total allomorphs for Verbs

This would yield 24 basic roots, 33 stem variants (14 past tense, 5 present tense, 5 future tense, 9 non-finite), 7 past tense suffix marker variants, 2 present suffix markers, 3 future tense suffix markers, 7 infinitive suffix variants, 7 (x 9) non-finite based suffix variants and 7 (x 4) past tense based suffix nts, 2 (x 1) present tense based suffix variants and 1 future tense suffix. The total would then mean a sum of: 24 basic roots + 33 stem variants + 12 markers + 7 infinitive markers + 63 non-finite based suffix variants + 31 finite/tensed based suffix variants = 170 verb allomorphs.

5.1.6 THE ANALYZER CHART FOR VERBS

The input to the Hybrid Tamil Morph would be a verb form that undergoes a series of morphemic stripping at each level of inflection as illustrated in the chart that follows.

The string is first scanned for a possible clitic at level 1. If found, it is stripped off by the 'Clitic Stripper' and stored in a temporary array with its relevant tag. The rest of the string is reconstructed and passed on to the next level of inflectional scan. Level 2 is that of Particle stripping. A similar processing takes place here, with the Particle being stripped off, tagged, and stored in a temporary array, the remaining string being reconstructed and passed on to the level 3 of Adverbials. This proceeds to level 4 of GNP marking, where a GNP suffix found is stripped away. This is followed by the level of Tense, and then Aspectual and Modal markers. If an Auxiliary Verb follows, the verb is seen as a non-finite base. The auxiliaries are stripped away, and so are the non-finite inflectional markers. The remaining verbal base is now reconstructed as the verb root, with all the relevant tagged morphemes that are stripped from and declared as the output.

A comprehensive list of all verbal affixes is also provided alongside.

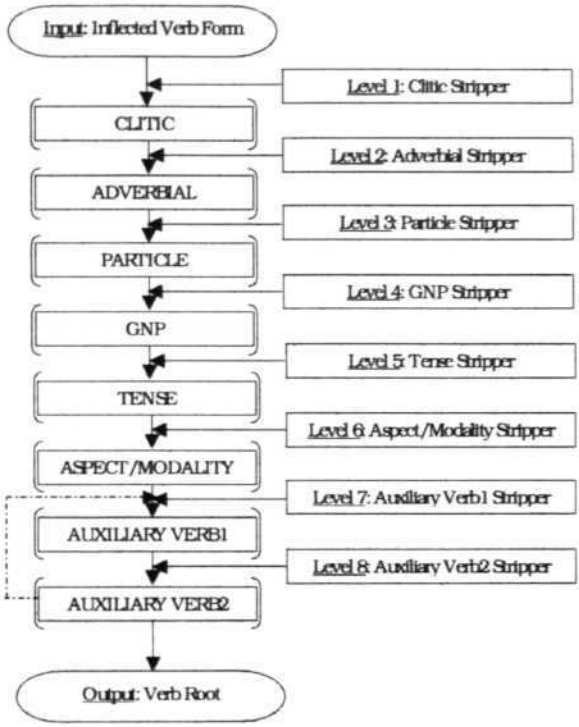


Figure 5.1(a): Morphological Analyzer Chart: Verb

Verbal Inflections

Clitics:
Avawu, A, o, e, um, kUta, mattum, wAnY, Am
Vocative Clitics:
atA/tA, atI/tI, atey/tey, ayyA, ammA/mA, appA/pA, afka/ufka

Particles:
eVnYpawu, eVnYrYu, eVnYrYa, eVnYa, eVnYrAl, mAwiri, AnYAl

Adverbials:
pinY, pirYaku, pirYpAtu, pinYpu, munYpu, varE, appolYYuwu, appuram, utanY

GNP Inflections:
enY, om, Ay, IrkalY/elY/Ifka, AnY, AlY, awu/um, Ar, ArkalY, anYa

Tense:
tt/ww/t/inY/nY/rY/nw (Past), kirY/kkirY (Present), v/p/pp (Future)

Aspect & Modality:
(a)lAm, (a)villE, (a)matt, Aw, Awa, Amal, AvittAl, um, koVNtiru, Al

Auxiliary Verb1: (after the Infinitival base)
vE, koVtu, coVl, potu, po, patu, vitu, mutiyum, illE, kUtAwu, veNtAm, veNtum, avaciyamillE

Auxiliary Verb2: (after the Positive Verbal Participle)
potu, po, vE, wlr, muti, woVlE, pAr, koVlY, walYlYu, AyirYrYu

Figure 5.1(b): list of Verbal Inflections/Suffixes

Chapter 6

Adjectives

6.1 Adjectives As A Category

Inflectionally, adjectives do have specific affixal patternings peculiar to them to mark them off as a category on their own. Therefore, one may consider adjectives as an inflecting class due to reasons explicated below. As to whether adjectives do constitute a separate morphological class, the perspectives follow thus[1].

Consider the following arguments for the given derivatory processes.

- Argument 1:

The adverbial marker *A ka* can be attached only to a nominal base but not to an adjectival base.

Case1:

[X] + *Aka* → [X][Aka]
N

Ex. maram + *A ka* → *maramA ka*
'As a tree'

Case2:

[X] + *Aka* → [X] [PE] [PP]
Ad,.

Ex. * *nalla* + *Aka* → **nallaA ka*
'As a good one'

- Argument 2:

The following operation dearly demarcates adjectives from nouns when a 3rd. person ending is added to the nominal and adjectival bases. So then, they result in two pronominalized word-forms however, having different senses as shown below:

Casel:

[X] + PE → 'ofN'
N

Ex. *maram* - *awu* → *marawwawu*
'Of a tree'

Case2:

[X] + PE → the Adj.-one
Adj.

Ex. *nalla* + *awu* → *nallawu*
The one that is good/the good one'

[1] For more details similar to this analysis See, Ramesh (1998)

2.4 Argument 3:

The particle *mAwiri* when follows an adjective needs necessarily be followed by *Aka*, an adverbial particle, after it. This obligatory following of an adverbial particle is not so, when the same particle follows a noun.

Case1:

|X| + mAwiri → [X *mAwiri*]
N_Nom.

Ex *mar* ***am*** + *mA wiri* → *maram mA wiri*
like a tree'

maram mA wiri nirYkAwe
'Don't stand like a log'

Casc2:

[X] + mAwiri → * [X*mAwiri*]

but,

Adj.
[X] + mAwiri + Aka → [X*mAwiriyAka*]
Adj.

Ex. *nalla* + *mAwiri* + *Aka* → *nallamAwiriyAka*
'Is good'

avalY ro V'mpa nallamAwiriyAka irukkAY
She very good like is — 3fem.sg.
'She seems to be very good'

Adjectives in Tamil are of two kinds: Basic, and Derived. Two basic adjectives are *nalla* and *puuu*. Derived adjectives can be distinguished as belonging to two types: (1) Denominal adjectives: those adjectives that are derived from nouns; (2) Deverbal adjectives: those that are derived from verbs. Denominal adjectives are derived by adding the suffix /+iya/, to the base form of nouns. This can be shown as:

	[X]$_N$	↔	[Xiya]$_{Adj}$
Ex.	*aNNYaku*	↔	*aNNYakiya*
	'beauty'	↔	'beautiful'

Verbal adjectives are derived through the addition of the suffix /+a/, following the tense base of the verb. This can be seen as:

	[X]$_N$	↔	X (tense) *a*]$_{Adj}$
Ex.	*cVy*	↔	*cVywa*
	'do'	↔	'that which has been done'

Adjectives in Tamil do not morphologically mark comparative and superlative degrees of relation. To syntactically express these, either of the two nominal postpositions, *pola*, and *vita* is used after the oblique form of a noun, which performs the predicative adjectival function. Although adjectives can be derived from both nouns, and verbs, taking on their suffixes, what really brings in morphological distinction, is rhe phenomenon of Affixal Homonymy.

6.1.1 Levels Of Adjectival Extensions

Inflectional patterning in the case of adjectives is largely unilayered. Particles are the chief morphological items that adjectives take on as inflectional suffixes, apart from certain postpositions and GNP inflections.

1: Particles (obligatory)
2: Postpositions (optional)

It can be shown that adjectives either take Particles straight after themselves or afrer GNP suffixes.

Adj_base + (GNP) +Particle + (Postposition)

6.1.2 Adjectival Classes

Only two classes of adjectives can be morphologically established. Most of the adjectives that are not basic arc derived from either nouns or verbs and hence classified as derived. The two following classes of adjectives could be considered distinct due to allomorphy of the base.

Sl. No.	Adjective	Base ending	Bound Base
1	nalla	a	0
2	puwu	u	+iya

Table 6.1: Adjectival Classes

While *nalla* does not exhibit any morphophonemic variation for the bound base, the stem *puwu* changes to the bound form *puuriya.* In the case of GNP inflection, *nalla* loses its final vowel, prior to suffixation, while in the case of *puwu,* it is the augment *riya,* that serves as base for GNP suffixation.

6.1.3 Analyzing Adjectives

An analysis of adjectives in Tamil would begin by stripping off at the morpho-syntactic level, Clirics, and at the purely morphological level, semi-bound and bound Particles, down ro primary inflectional markers that inflect for the 3rd. person GNP suffixes. After segmenting items of each level based on their order of occurrence, the stem may be obtained.

6.1.3.1 Particles and GNP Suffixes

Particles are of two kinds: Non-adverbial, and Adverbial. Those that follow adjectives at the primary level are three:

viwam	Comparative1
mA win	Comparative2
pati	Comparanve3

Table 6.2 Adjectival Particles

Two adverbial postpositions *AnYa* and *Aka* necessarily follow any of the three preceding particles.

The addition of the 3rd. person pronominal endings renders adjectives as nouns, as shown below:

Adj _ + awu	3rd. Singular Neuter
Adj _ + avaLY	3rd. Singular Feminine
Adj _ + avanY	3rd. Singular Masculine
Adj _ + avar	3rd. Sing.Hon. /Plural

Table 6.3: Adjectival GNP suffixes

It is only the 3rd. person GNP suffixes that can attach to the adjectival base.

6.1.4 Adjectives: Morphophonemics & Allomorphy

The process of suffixation effects certain phonological and morphophonemic changes on stems and suffixes. The following describes and accounts for such changes at each level of adjectival inflection.

In Tamil adjectives may be divided into two classes based on their morphophonemic behaviour.

The stem for Class 1 remains unmarked, i.e., has a null suffix, whereas Class 2 involves an additive augment *iya*, which forms the base for the addition of GNP suffixes.

The class of stems that undergoes a change for the combining form is as follows:

Class 2 — *puwu* — *puwu* + *iya* → *puwiya*

Rule: *u* → 0 / _*iya*

There are 4 GNP suffixes that can attach on to the combining base of adjectives, all of which are the 3rd. person suffixes. Before the addition of the GNP suffixes, it is the augment in the bound form that undergoes the final vowel deletion.

Class 2 - **puwu** – *puwiya*+ *avaN* → *puwiyavaN*

Rule: *a* → 0 / _*avaN*

SL No.	2 **Basic Stems**	1 **Stem variant**	1 **GNP** base	4 **GNP** suffixes
1	nalla	-	-	•GNP (1-4)
2	puwu	puw	iya	*GNP (1-4)
***GNP** suffixes **3sh** (*avar*), **3sm** (*avanY*), 3sf (*avaN*) & **3sn** (*awu*)				

Table 6.4: Total allomorphs for Adjectives

The number of resulting allomorphs therefore, would include 2 stems each with 1 variant, and 5 suffixes. The total would then mean a sum of: 2 basic stems + 1 stem variant + 1 GNP base + 4 GNP suffixes = 8 allomorphs for adjectives.

6.1.5 The Analyzer Chart for Adjectives

The input to the Hybrid Tamil Morph would be a adjective form that undergoes a series of morphemic strippings at each level of inflection as illustrated in the chart that follows.

The string is first scanned for a possible clitic at level 1. If found, it is stripped off by the 'Clitic Stripper' and stored in a temporary array with its relevant tag. The rest of the string is reconstructed and passed on to the next level of inflectional scan. Level 2 is that of GNP stripping. A similar processing takes place here, with the GNP suffix being stripped off, tagged, and stored in a temporary array, while the remaining string is reconstructed and passed on to the level 3 of Postpositions. These stripped off, the analysis moves on to level 4 of the Particles. Thereafter, the parse proceeds to level 5 of the Direct or Indirect (bound)forms, which detects the combining marker to be stripped off by the 'Augment Stripper'. This reconstructs the adjectival base after the augment has been determined. The resulting string is declared as the adjectival stem, with the rest of the remaining inflections and suffixes declared with their tags, as encountered at each level of the parse.

A comprehensive list of all adjectival affixes is also provided alongside.

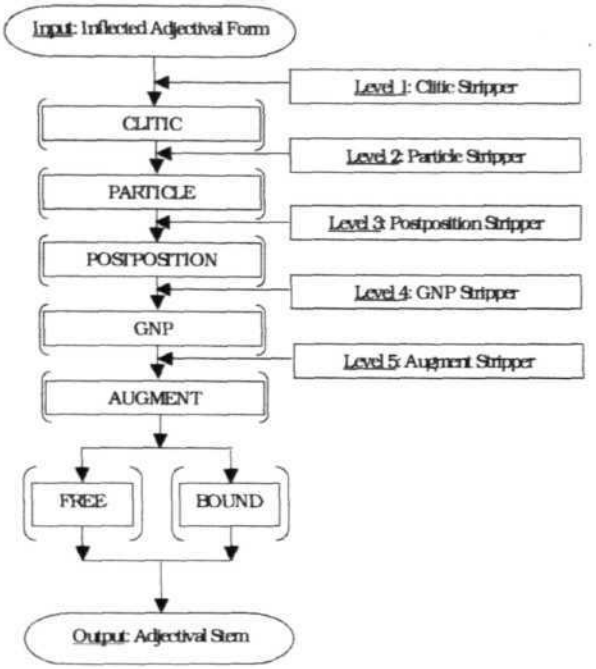


Figure 6.1(a): Morphological Analyzer Chart: Adjective

Adjectival Inflections

Clitics:
Avawu, A, o, e, um, kUta, mattum, wAnY, Am

Particles after the Free form:
mAwiri, pati, viwam

Particles after the Bound form:
evnYa, eVnYappatuvawu, eVnYrYAl, eVnYrYu, eVnYpawu

Postpositions after the Oblique:
AnYa, Aka

GNP Inflections:
avalY, avanY, avar, awu

Augment Inflections:
Ø, iya

Figure 6.1(b): List **of Adjectival Inflections/Suffixes**

Chapter 7

Computational Models

7.1 Computational Models

Morphological analyses involve by and large either the *Combinatorial,* or the *Relational* approaches. Models like the *Item and Arrangement* (Hockett 1958), the *Item and Process* (Hockett 1958) involve a necessary segmentation of a morphological string into a base and one or more affixes, whereas the *Word and Paradigm* (Robbins 1963), represents both the combinatorial and relational approaches. Models like the *Word Network* (Singh and Ford 1984) characterize the relational approach, which implicates the concept that it is the 'word', and not the morpheme, and morphology can be interpreted as a complex relationship it shares with other similar words.

An analyzer fashioned in the LA model of morphology, crucially maintains that 'all morphemes are lexical items', and enlists all morphemes of the language with the necessary feature specifications for each item on the list. Stems and affixes would be separately stored with information on relatable pairs of stems and affixes. Analysis of word-forms is then done through pattern matching, denoted by identity of the morphemic formants in word-forms of variable complexity.

If it is the IP model of morphology that the analyzer uses, according to the theoretical assumptions it makes, the abstract underlying morpheme finds its surface realization through different morphs in contextually determined morphophonemic states. Both roots and affixes are listed in their basic allomorphic shapes and pattern matching of variant surface allomorphic combinations are accessed through the operation of morphophonemic rules that account for these alternations, and which specify conditions of allomorphy.

The use of the WP model of morphology for the analysis of word-forms in spirit can be seen as more of a Relational approach, when compared to the LA or the IP. A mere listing of representatives of each paradigm is not sufficient, since derivatory processes operating within the cells of each paradigm exhibit idiosyncratic behaviour. Only roots, here, are recognized as lexical entries and all possible affixations on various roots or stems are made possible through the introduction of WFRs. Analysis of word-forms is triggered by rules working on these combinatorial links.

The Word and Network model is regarded as a Full-listing model for morphological analysis. The essence of the Relational approach seems to be more favourable for the production and recognition of word-forms. Since 'affixes don't exist anywhere outside the words in which they appear', (Singh 1996) adopting this theory for an analyzer presupposes a comparison of networks between forms rather than view it as a series of derivatory operations, as in the WP. No specific morphological status is given to concepts like the

'root', or the 'affix', although for technical purposes one would need to observe these distinctions.

Platforms like AMPLE and KIMMO, the two comparatively well-established computational formalisms, served to design morphological analyzers and generators for various languages.

In a sense though AMPLE is designed based on an Item and Arrangement model of morphology, the underlying principle could be better defined as one of "allomorph matching". The linguistic database comprises of a comprehensive listing of all the allomorphs, for each of the word classes of the language. Wrong combinations of stems and suffixes can be disallowed through specifying phonological, morphophonemic or morphological constraints wherever necessary.

KIMMO is largely based on the theory of generative phonology, and implemented as a bi-directional processor of underlying basic allomorphs to surface orthographic forms, called "two level morphology". A phonological rule builds up a direct correspondence between the underlying form of a word and its surface realization based on the actual environment where it occurs. Rules relate the nature of a transformational rule based on context of occurrence, along with specifying the frequency of application. The functioning relies on what may be termed as a "finite state automaton", which processes an input word through a sequential scanning of the given string.

A theoretically established set of principles cannot be transferred per se to fit into a computational framework. Implementing morphological class features or processes, into a specific formalism would invariably necessitate certain technical adjustments of theory, in order that it evolve as a fine-tuned sophisticated working model. Different implementations of models of morphological analysis that we have attempted here are with a view to learn if theory and formalism do indeed go hand-in-hand, through the process of implementation.

7.1.1 THE HYBRID MODEL

The Hybrid model developed and implemented in PERL constitutes a framework of an in-built lexicon and a set of IA and IP rules for every distinct word class of the language. An analysis of this is demonstrated by way of invoking the corresponding subroutines that function based on the provided morphophonemic rules. Designed to handle word-forms of every category, it functions on what is dictated by internal files of the main setup. There is an inherent encoding of linguistic information in the programme. What is actually done is a processing of linguistic information through open-ended morphophonemic and allomomorphy rules.

The model finds its theoretical basis in a blend of the IA and IP models of morphology. The functioning can be described as defining a transformation depending on the morphemic nature of the word stem. A word is parsed after it has passed through the whole series of conditionals specified at each stage of inflectional stripping.

The analysis module performs a scanning of the string from the right to the left periphery scanning each suffix at a time, stripping it, and reconstructing the rest of the word with the aid of P and MP rules exemplified in each instance. This goes on till the string is exhausted. Output is in the form of morphemes, those that have been identified, and then validated.

7.1.1.1 Theory and Implementation

The model is oriented towards the IA approach of morphology, and resorts to IP for solutions to non-concatenative phenomena such as *Sandhi*. Every phonological or morphophonological phenomenon is embedded in transformational rules. Morphophonemic changes involving every item of a morphological paradigm are illustrated through a set of substitution or transformational rules.

7.1.1.2 Formalism & Construct

The Hybrid model that is implemented in PERL is a computational model that can function either as a unified model operating through a main control programme invoking smaller modules functioning as 5 separate blocks working independently. The controlling module requires the following six portions as part of the control information:

1. NounTamil
2. PronounTamil
3. NumeralTamil
4. VerbTamil
5. AdjectiveTamil
6. Lexicon
7. Exit

Sections 1 to 5 include the analysis component for each of the word classes in Tamil. Each of these sections includes the rules for the analysis of the relevant word class in Tamil. Analysis proceeds with the stripping of the closing suffix or inflection at every level, proceeding from the right end of the input string (For details on the nature of analysis, refer the flow charts - Figures 4.1(a,b), 4.2(a,b), 4.3(a,b), 5.1(a,b), 6.1(a,b)).

The control file calls the internal commands in the programme. Any given word form that is taken in as input undergoes a series of checks by the 5 analysis modules built to tackle each of the word classes in Tamil, i.e., Noun, Pronoun, Numeral, Verb and Adjective. A successful parse is produced as the output. The central loop looks like the following:

```
#!/usr/bin/perl
# Required Include Code Files

require "Lexicon";
require "Noun";
require "Pronoun";
require "Numeral";
require "Verb";
require "Adjective";
require "Exit";
require "Error";

# Start of Main Block
$ch='y';
while($ch=~/y/)
{
        system("clear");
        print "              \n\t\t\the HYBRID Morph - Tamil \n\n";
        print "\t\tEnter the word to analyze ... ";
        $word=<>;
        chop($word);
        Noun();
```

```
        Pronoun();
        Numeral();
        Verb();
        Adjective();
        print "\n\t\tDo you want to continue ( Y/N) ? ";
        $ch=<>;
        $ch=lc($ch);        # Continue Main Block if needed
        chop($ch);
}
while($ch=~/n/)
{
   exit();
}
1,                  # End of Main Block
```

The lexicon file LEXICON forms a component that consists of a comprehensive list of all the inflections and suffixes that follow the word forms, the format of which would appear as this:

```
#/usr/bin/perl

@Sliti = qw ( mattum e o A Avawu wAnY kUta urn);
@NounPl_Acc = qw ( wavira vita pola pol ponYrYa parYrYl );
@NounPP_Nom = qw ( mUlam varE illAwa illAwapowu );
@NounAdv_Dat =qw ( itE ulY veVlYi melkIlYY mawwi aruk ati eVwir natu appAl munY munYpu munwi
                   munYnYAl pinY pinYpu pinwi pinYnYAl pirYaku appuram atuwwa merYku vatakku
                   kilYYakku weVrYku );
```

The suffixes needed to be recorded as lexical entries since inflections are seen as allophonic conditionings in the transformational component. For instance, the string *utEya*, indicative of the Genitive case would form the key word for a loop dealing with a set of transformations. This can be shown as:

```
if($word =~ /([A-Za-z])(utEya)([A-Za-z])/)
{
        $nomcase="Genitive";
        $nomcaseform="utEya";
        $nounword =- s/(.*kkalY)utEya(.*)/$1/;
        $nounword =~ s/(.*ll)utEya(.*)/$1/;
        $nounword =~ s/(.*rYkalY)utEya(.*)/$1/;
        $nounword =~ s/(.*lY)utEya(.*)/$1/;
        $nounword =~ s/(.*lYkalY)utEya(.*)/$1/;
        print "\t\tCase: $nomcase\ ($nomcaseform)\n";
}
```

All information in the model is handled within the programme.

Information with regard to a morpheme's category, its phonological and morphological properties and the constraint that binds it are all provided as tagged variables. Both morphophonemic and morphotactic constraints can be imposed only through ordering of loops, and ordering of rules within loops. Phonotactics and Phonological constraints are imposed as specifications for a particular morpheme within its loop.

String Environment Constraints[1] (SECs) apply to every allomorph of the affix, specifically at leading morpheme boundary markers. Morpheme Environment Constraints

[1] **For details on SECs and MECs sec Section 7.1.2.2, pg. 112.**

(MECs) impose morpheme environment constraints on the allomorph of the current morpheme.

7.1.1.3 Framework for The Hybrid model

Capturing the complex agglutinative morphology of Tamil morphological classes in a formalism like the present model demands a detailed listing of both stem and suffix allomorphy, along with the relevant combinatorial constraints. This is so, because the model draws its basic principles from the Item and Arrangement (IA) model of morphology.

It is here, in accordance with Maxwell's views that I wish to reason out that although theoretically, the IA and IP models represent wide differences, such principles converge in practice. (For a detailed discussion refer Ch.8, Sec.8.9)

7.1.1.4 Allomorphy

The concern for economy in stem and suffix allomorphy needs to be given forethought. What therefore remains to be determined is whether a simplification of allomorphy illustrates economy in formalism, and if it does, which part of the word form needs to be morphologically simplified. On grounds of intuition, if shifting the burden of allomorphy from stem to suffix or vice-versa seems more justifiable, the paradigmatic structure of the word classes needs to be changed accordingly, to suit implementation.

Economy in allomorphy can be compromised over economy in rules and/or constraints. Hence the best way to recapture morphology in the IA framework would be to enlist all allomorphic variants of the morphological forms of the language. The theoretical set of paradigms therefore can be directly adapted for the purposes of implementation.

7.1.1.4.1 NOUNS

In the model below, we need to set up 23 paradigm types for Tamil nouns, as in the following:

Sl. No.	Stem1/Suffix1 (Dict. Entry)	Stem2/Suffix2	Stem3/Suffix3
1	AN	AN] ∅	AN] kaL
2	ARu	AR] R	ARu] kaL
3	eli	eli] y	eli] kaL
4	ilY	ilY] y	ilY] kaL
5	iwaZ	iwaZ] ∅	iwaZ] kaL
6	I	I] y	I] kkaL
7	kaN	kaN] N	kaN] kaL
8	kAl ∅	kAl] ∅	kAl] kaL
9	kAtu	kAt] t	kAtu] kaL
10	maMiwaM	maMiwaM] ∅	maMiwar] kaL
11	maram	mara] ww	maraf] kaL
12	muL	muL] L	mut] kaL
13	mAM	mAM] ∅	mAM] kaL
14	narampu	naramp] ∅	narampu] kaL
15	nAy	nAy] ∅	nAy] kaL

16	poM	poM] M	poM] ∅
17	poy	poy] y	poy] kaL
18	pul	pul] l	puR] kaL
19	poruL	poruL] ∅	porut] kaL
20	pU	pU] v	pU] kkaL
21	vaNtu	vaNt] ∅	vaNtu] kaL
22	wEr	wEr] ∅	wEr] kaL
23	wOL	wOL] ∅	wOL] kaL

Table 7.1: Paradigm Types/Stem Variations for Nouns in the Hybrid model

The total number of resulting allomorphs would include 23 basic stems, 10 stem variants for number and case, and for a valid consideration of a true case suffix, the oblique marker suffix that realizes, as one of its 9 variants would have to further combine with one of the 8 different case suffixes. This would in fact, result in 72 suffix allomorphs for case marking alone. The total would then mean a sum of: 23 basic stems + 10 stem variants + 9 oblique markers (x 8 case suffixes) + 8 basic case suffixes + 1 basic number suffix + 1 number suffix variant = 115 allomorphs for nouns.

7.1.1.4.2 PRONOUNS

In the model below, we need to set up 15 paradigm types for Tamil pronouns, as in the following:

Sl. No.	Stem1/Suffix1 (Dict. Entry)	Stem2/Suffix2	Stem3/Suffix3
1	avaL	avaL] ∅	avaL] ∅
2	avaM	avaM] ∅	avaM] ∅
3	avar ∅	avar] ∅	avar] ∅
4	awu	aw] ∅	aw] w
5	nAM	eM] ∅	eM] M
6	nAfkaL	efkaL] ∅	efkaL] ∅
7	nI	uM] ∅	uM] M
9	nIfkaL	ufkaL] ∅	ufkaL] ∅
10	nIr	um] ∅	um] m
11	yAm	yam] ∅	em] m
12	wAfkaL	wafkaL] ∅	wafkaL] ∅
13	wAm	wam] ∅	wam] m
14	wAM	waM] ∅	waM] M
15	nAm	nam] ∅	nam] m

Table 7.2: Paradigm Types/Stem Variations for Pronouns in the Hybrid model

This comprises of 15 basic stems, 11 stem variants, 3 oblique case marker variants and 8 cases. The three oblique marker variants combine with one of the 8 different case suffixes. The total would then mean a sum of: 15 basic stems + 11 stem variants + 8 basic cases suffixes + 3 oblique markers (x 8 case suffixes) = 58 pronoun allomorphs.

7.1.1.4.3 NUMERALS

In the model below, we need to set up 14 paradigm types for Tamil numerals, as in the following:

Sl. No.	Stem1/Suffix1 (Dict. Entry)	Stem2/Suffix2	Stem3/Suffix3	Stem4/Suffix4
1	oMRu	oMR] ∅	oru] v	oMR] Am
2	iraNtu	iraNt] ∅	iru] v	iraNt] Am
3	mUMRu	mUMR] ∅	mU] v	mUMR] Am
4	nAMku	nAMk] ∅	nAl] v	nAMk] Am
5	Ynwu	Ynw] ∅	Y] v	Ynw] Am
6	ARu	AR] ∅	aRu] v	AR] Am
7	EZu	EZ] ∅	eZu] v	EZ] Am
8	ettu	ett] ∅	eN] m	ett] Am
9	oMpawu	oMpaw] ∅	oMpawu] ∅	oMpaw] Am
10	pawwu	paww] ∅	pawwu] ∅	paww] Am
11	nURu	nUR] R	nURu] ∅	nUR] RAm
12	Ayiram	Ayira] ww	Ayiram] ∅	Ayira] wwu
13	latcam	latca] ww	latcam] ∅	latca] wwu
14	kOti	kOti] y	kOti] ∅	kOti] ∅

Table 7.3: Paradigm Types/Stem Variations for Numerals in the Hybrid model

This comprises of 14 basic stems, 13 stem variants (for case and ordinality), 3 ordinality marker variants, 2 GNP marker variants, 4 GNP suffixes, 3 oblique case marker variants and 8 cases. The three oblique marker variants combine with one of the 8 different case suffixes. The total would then mean a sum of: 14 basic stems + 13 stem variants + 3 ordinality suffixes + 2 GNP marker variants (x 1 GNP suffix) + 3 GNP suffixes + 8 basic cases suffixes + 3 oblique markers (x 8 case suffixes) = 67 numeral allomorphs.

7.1.1.4.4 VERBS

In the model below, we need to set up 24 paradigm types for Tamil verbs, as in the following:

Sl. No.	Base1/Suffix1 (Dict. Entry)	Base2/Suffix2 (Past)	Base3/Suffix3 (Present)	Base4/Suffix4 (Future)	Base5/Suffix5 (Non-finite)
1	Aku	A] M	A] kiR	A] v	Ak] a
2	AL	AN] t	AL] kiR	AL] v	AL] a
3	aZu	aZu] w	aZu] kiR	aZu] v	aZ] a
4	cA	ce] ww	cA] kiR	cA] v	cA] ka
5	cel	ceM] R	cel] kiR	cel] v	cel] la
6	cey	cey] w	cey]kiR	cey] v	cey]ya
7	col	coM] M	col] kiR	col] v	col] la
8	eM	eM] R	eM] kiR	eM] p	eM] a
9	ikaZ	ikaZ] nw	ikaZ] kiR	ikaZ] v	ikaZ] a
10	iru	iru] nw	iru] kkiR	iru] pp	iru] kka
11	kAN	kaN] t	kAN] kiR	kAN] p	kAN] a

12	kEL	kEt] t	kEt] kiR	kEt] p	kEt] ka
13	koL	koN] t	koL] kiR	koL] v	koL] La
14	nil	niM] R	niR] kiR	niR] p	niR] ka
15	nO	no] nw	nO] kiR	nO] v	nO] ka
16	pati	pati] ww	pati] kkiR	pati] pp	pati] kka
17	peRu	peR] R	peRu] kiR	peRu] v	peR] a
18	pO	pO] M	pO] kiR	pO] v	pO] ka
19	pOtu	pOt] t	pOtu] kiR	pOtu] v	pOt] a
20	pUN	pUN] t	pUNu] kiR	pUNu] v	pUN] a
21	uN	uN] t	uN] kiR	uN] p	uN] Na
22	vA	va] nw	varu] kiR	varu] v	var] a
23	viZu	viZu] nw	viZu] kiR	viZu] v	viZ] a
24	wUfku	wUfk] iM	wUfku] kiR	wUfku] v	wUfk] a

Table 7.4: Paradigm Types/Stem Variations for Verbs in the Hybrid model

This would yield 24 basic roots, 33 stem variants (14 past tense, 5 present tense, 5 future tense, 9 non-finite), 7 past tense suffix marker variants, 2 present tense suffix markers, 3 future tense suffix markers, 7 infinitive suffix variants, 7 (x 9) non-finite based suffix variants and 7 (x 4) past tense based suffix variants, 2 (x 1) present tense based suffix variants and 1 future tense suffix. The total would then mean a sum of: 24 basic roots + 33 stem variants + 12 tense markers + 7 infinitive markers + 63 non-finite based suffix variants + 31 finite/tensed based suffix variants = 170 verb allomorphs.

7.1.1.4.5 ADJECTIVES

In the model below, we need to set up 2 paradigm types for Tamil adjectives, as in the following:

Sl. No.	Stem1/Suffix1 (Dict. Entry)	Stem2/Suffix2	Stem3/Suffix3
1	nalla	nalla] ∅	nalla] v
2	puwu	puw] iya	puwiya] v

Table 7.5: Paradigm Types/Stem Variations for Adjectives in the Hybrid model

This comprises of 2 basic stems, 1 stem variant, 1 augment, 1 GNP marker and 3 GNP suffixes. The total would then mean a sum of: 2 basic stems + 1 stem variant + 1 augment suffix + 1 GNP suffix + 1 GNP marker (x 3 GNP suffixes) = 8 adjective allomorphs.

7.1.1.5 Implementing the HYBRID model

The Hybrid model essentially has five subroutines meant for the analysis of each of the five different word classes in Tamil. Since the model largely works on the Item and Arrangement model of morphology, the database involves an inventory of the entire set of word stems or bases that exhibit Sandhi change encountered at each level of analysis, and appropriate rules that would account for the phonological or morphophonemic change, followed by a reconstruction of the remaining word stem, after the preceding suffix has been stripped off.

As a case in point, an analysis of a complex noun form such as *marafkaLYukkumelwAnY*

can be shown thus — To begin with, a word-form is an input string to the noun subroutine 'Noun ()'. The scanning of the string begins at the right periphery, and enters the initial loop for clitic recognition:

```
foi<$i=O;$i<=$#Clitic;$i++)
{
$len=-(length($Clitic[$i]));
$temp=substr($word,$len);
if($temp =~ $Clitic[$i])
{
$nounword =~ s/$Clitic[$i]//;
$clitic=$Clitic[$i];
}
 if($word =~ /(|A-Za-z])(wAnY)$/)
{
        $cliticform="Emphatic2";
        $clitic="wAnY";
        $nounword •- s/(.*)wAnY/$1/;
print "\t\tClitic: $cliticform\ ($ditic)\n";
}
:
```

The current implementation essentially draws upon the Item and Arrangement model for morphological parsing. The database comprises of a comprehensive list of all the stems and their suffixes, in all their allomorphic variations, along with string environment constraints, morpheme environment constraints and morpheme co-occurrence constraints, that function as combinatorial rules, or rather, contextual constraints, to prevent overgeneration.

On psycholinguistic lines, the model's morphology does not conform to any of the frameworks of the string-scan models. It can be grouped rather with the category-split models, particularly in accordance with the Taft & Forster model. Scanning of a given string sequence proceeds from the left to the right. Suffixes relatively are more prone to allophonic/allomorphic changes than stems are, and therefore left-to-right parsing apparently resolves ambiguity a lot more simply.

In effect, 6 of the routines in the model are language specific, depending on the number of word classes in the relevant language. Tamil involves 5 files or routines for language data encoding, one each for Nouns, Pronouns, Numerals, Verbs and Adjectives. Besides, there is a Lexicon module, which requires a listing of all suffixes of the language, along with their relevant tags, stated in specialized arrays. Each of the data files to be processed is programmed as a subroutine that proceeds in accordance with the specified order of inflectional stripping.

While outer levels of inflectional extensions such as Adverbials, Postpositions, Particles, Auxiliary Verbs and Clitics are specifies in the common lexicon, class-specific, inflections such as number, case and tense forms are declared in specific loops in the relevant category-specific subroutines.

In consultation with the lexicon, each inflection/suffix is stripped off, tagged and stored in a temporary array, while the remaining stem reconstructed and passed on to the next level of inflectional stripping, until all possible suffixes in an input string have been exhausted. Finally, all of the recognized inflections/suffixes along with the reconstructed word stem are displayed as the final result.

Since all morphemes are declared per se, the need for a phonemic inventor)' of the language is not necessary. Morpheme strings are tagged in the respective loops they occur in. For a list of tags used, please refer *Abbreviations.*

Phonological and Morphophonemic changes for inflectional stripping and reconstruction of the remnant stem are incorporated into the rules at each level. Unlike AMPLE or KIMMO, that involve an additional component for String and Morpheme classes, there is no comprehensive way of encoding a negation class, to tackle either phonotactics or morphotactics. Instead environmental and co-occcurential constraints are directly rooted in a particular morphemic string in each loop. This executes the necessary changes for each paradigmatic entry for a word class.

The model is flexible in that it accommodates its text input format. Any tranliteration scheme can be used, with no restraints on the number of characters to represent any specific letter in an alphabet.

7.1.1.6 Testing & Debugging

After the entire database has been all set, the process of testing the analyzer begins with a textual input through an input file comprising of the list of words to be parsed. Word analysis progresses when the batch file is processed, whereby each entry in the file then passes through a series of tests, and the output is rendered in a specified output file, indicating the outcome of the parse(s) in a particular format.

7.1.1.7 Output Samples

Entries in the input file can be fed in a linear order, each separated by spaces. The analyzed output would be something as illustrated below:

1) *kAttYccuRRimattumA*
is analyzed as:

Noun Form:	kAttEccurYrYimattumA
Clitic:	Interrogative2 **(A)**
Clitic:	Restrictive1 (mattum)
Case:	Accusative (E)
Number	Singular (0)
Oblique suffix	t
Noun Root:	kAtu

2) *ufkaLOtuwAME*
is analyzed as:

Pronoun Form:	ufkalYotuwAnYe
Clitic	Emphatic2 (e)
Clitic:	Emphatic1 (wAnY)
Case:	Sociative (otu)
PronGNP form;	2nd.person,Plural/Honorific,(Masc/Fem) (ufkalY)
Oblique suffix:	0
Pronoun Root:	nlfkalY

3) ettEmukkAlwAMO

is analyzed as:

Numeral Form:	eVttemukkAlwAnYo
Clitic:	Interrogative1 **(o)**
Clitic:	**i Emphatic 1** (wAnY)
Postposition:	**Nominative (emukkAI)**
Case:	**Oblique (0)**
Oblique suffix:	**0**
Numeral Root:	**eVttu**

4) ceyyamA ttirkaLA

is analyzed as:

Clitic	Interrogative2 **(A)**
VbGNPsuffix:	**2nd.person (person)**
	Plural/Honorific **(number)**
	Masculine/Feminine **(gender)**
	1 J reran- (dialect)
	(IrkalY)
TAM:	**Negative Future** (mAtt)
Base:	NonFinite
Verb Root:	ceVy

5) puwiyaval

is analyzed as:

Adjectival Form:	puwiyavalY
Case:	**Augment (iya)**
GNP suffix:	3rd.person,Singular, Feminine (avalY)
Adjective Root:	puwu

A zero in the analysis field, as in the following example, indicates a failure in parse. The input string *maNkaL* is not a valid string in Tamil. The output analysis for this word form is therefore indicated as a failure.

7.1.2 THE AMPLE ANALYZER

AMPLE can be called 'generic' in the sense that it does not have any language-specific functions embedded in it. AMPLE functions on what is dictated by external files. AMPLE is designed to handle prefixes, infixes, suffixes, roots, compound roots, and any combination of these. Null morpheme occurrences can also be tackled through strict in-built constraints.

AMPLE does not have as its basis of functioning, either 'transition network grammar', 6r 'finite state machines'. AMPLE uses not a single, but a number of computational mechanisms, so as to model a range of linguistic phenomena. Various constraints that form the central process of functioning in AMPLE are established through linguistic notations, and not through computational ones. There is no inherent encoding of linguistic information in the AMPLE programme. What is actually done is a processing of language data through external files carrying linguistic information. A large portion of information is provided through open-ended morpheme dictionaries.

AMPLE finds its theoretical basis on the Item and Arrangement model of morphology. The functioning can be described as "allomorph matching". Processing words involves the functioning of two modules. The TXTIN module first relieves the input text of all white space characterizations, punctuation, formatting, and the like. This text then forms input to the Analysis module, which performs a scanning of the string from the left periphery stopping at each character to check for a match for an identifiable morpheme. This goes on

till the string is exhausted. Output is in the form of morphemes, those that have been identified, and then validated. Two kinds of tests serve to check the validity of the output. First, the 'successor' tests that compare the proposed allomorph to its immediately preceding morpheme. Secondly, the 'final' tests check the validity of its occurrence, after the whole parse has been made. Only those strings that pass the successor tests can find their way to the final tests. Potentially invalidated analyses are thus filtered out in an efficient fashion.

7.1.2.1 Theory and Implementation

AMPLE is oriented more towards the "Item and Arrangement" approach of morphology, aiming at simpler and faster functioning. AMPLE provides a concatenative solution to non-concatenative phenomena such as Ablaut, Vowel harmony, Tone,,etc... A solution would be to list the allomorphs and constrain their co-occurrence.

For instance, 'foot' and 'feet' can either be listed as different root entries with no link established about their relatedness; or else, 'feet' is given as an allomorph input of 'foot' (feet + Ø plural suffix).

7.1.2.2 Formalism & Construct

AMPLE is a construct of two modules:

1) TEXT INPUT module (TXTIN - text input).
2) ANALYSIS module (morphological parsing).

TXTIN functions splitting off punctuation marks, format marking, white space, and capitalization details. 'Words', then are passed on to ANALYSIS. ANALYSTS functions, analyzing every word into its constituent morphemes returning the morph name (gloss).

The ANALYSIS module requires the following five types of control information:

i. Analysis Data File. (Eliminates false analyses by controlling types of affix dictionaries; specifies categories and feature-values; checks morpheme co-occurrence constraints).
ii. Dictionary Code Table. (Establishes link between field codes and codes by which AMPLE identifies different types of data).
iii. Dictionary Orthography Change Table. (Orthographic representations of allomorphs are converted into a more phonemic one, while the dictionary is loaded).
iv. Suffix Dictionary.
v. Root Dictionary.

All information in AMPLE is handled as a 'database'. A database file is a collection of one or more records. A record is made up of fields. Field codes encode the information.

The affix dictionary contains allomorphic variants, morphophonemic/morphotactic properties, categorical properties (in terms of pre- and post- unification operations), gloss, and the number indicating the relative order of affixes, etc...

The field codes in a root dictionary include information on the root word's allomorphy, etymology, category, gloss, morpheme property and the constraint that binds it.

Controls over morphological analyses are imposed through the fine established morphotactic constraints like Order Class Constraints (OCC), Categorical Constraints (CC), Morpheme Co-occurrence Constraints (MCC) and, morphophonemic constraints like String

Environment Constraints (SEC) and, Morpheme Environment Constraints (MEC). Certain ad hoc mechanisms, Successor and Final Tests, also regulate the analysis.

OCCs indicate the position of the affix relative to other morphemes. Through assigning numerical values to prefixes as negative, roots as zero and suffixes as positive, they never allow two affixes of the same 'order' to co-occur. Order class is assigned in such a way that the numbers for any acceptable sequence of affixes increases from left to right Constraints can thus be easily imposed, on the ordering of morphemes. CCs not merely involve defining of unique grammatical categorizations for each entry in the analysis data file but also, necessitate an explicit representation of the transition of morphological categories effected through unification of feature structures. MCCs restrict the occurrence of a morpheme, or a group of contiguous morphemes.

SECs apply to every allomorph of an affix, specifically at leading morpheme boundary markers. MECs impose morpheme environment constraints on the allomorph of the current morpheme.

7.1.2.3 Framework for the AMPLE Model

Capturing a set of Tamil morphological classes in a formalism like AMPLE, demands a detailed listing of both stem and suffix allomorphy, along with the relevant combinatorial constraints. This is so, because AMPLE is designed on the Item and Arrangement (IA) model of morphology.

It is here, in accordance with Maxwell's views that I wish to reason out that although theoretically, the IA and IP models represent wide differences, such principles converge in practice. (For a detailed discussion refer Ch.8)

7.1.2.4 Allomorphy

The concern for economy in stem and suffix allomorphy needs to be given forethought. What therefore remains to be determined is whether a simplification of allomorphy culminates in economy in formalism, and if it does, which part of the word form needs to be morphologically simplified. On grounds of naturalness, the shifting of the burden of allomorphy from stem to suffix seems more justifiable, and accordingly the paradigm types of the word classes changed.

Economy in allomorphy can be compromised over economy in rules and/or constraints. Hence the best way to recapture morphology in the IA framework would be to enlist all allomorphic variants of the morphological forms of the language. The theoretical set of paradigms therefore can be directly adapted for the purposes of implementation.

7.1.2.4.1 NOUNS

In the model below, we need to set up 23 paradigm types for Tamil nouns, as in the following:

Sl. No.	Stem1/Suffix1 (Dict. Entry)	Stem2/Suffix2	Stem3/Suffix3
1	AN	AN] ∅	AN] kaL
2	ARu	AR] R	ARu] kaL

3	eli	eli] y	eli] kaL
4	ilY	ilY] y	ilY] kaL
5	iwaZ	iwaZ] 0	iwaZ] kaL
6	I	I] y	IlkkaL
7	kaN	kaN] N	kaN] kaL
8	kAl	kAl] ∅	kAl]kaL
9	kAtu	kAt] t	kAtu] kaL
10	maMiwaM	maMiwaM] 0	maMiwar] kaL
11	maram	mara] ww	maraf] kaL
12	muL	muL] L	mut] kaL
13	mAM	mAM]0	mAM] kaL
14	narampu	naramp | 0	narampu] kaL
15	nAy	nAy] ∅	nAy] kaL
16	poM	poM] M	poM]0
17	poy	poy | y	poy] kaL
18	pul	pul] l	puR]kaL
19	poruL	poruL] 0	porut] kaL
20	pU	pU] v	pU] kkaL
21	vaNtu	vaNt] 0	vaNtu] kaL
22	wEr	wEr] 0	wEr] kaL
23	wOL	wOL] ∅	wOL] kaL

Table 7.6: Paradigm Types/Stem Variations for Nouns in the AMPLE Analyzer

The total number of resulting allomorphs would include 23 basic stems, 10 stem variants for number and case, and for a valid consideration of a true case suffix, the oblique marker suffix that realizes, as one of its 9 variants would have to further combine with one of the 8 different case suffixes. This would in fact, result in 72 suffix allomorphs for case marking alone. The total would then mean a sum of: 23 basic stems + 10 stem variants + 9 oblique markers (x 8 case suffixes) + 8 basic case suffixes + 1 basic number suffix + 1 number suffix variant = 115 allomorphs for nouns.

?.1.2.4.2 PRONOUNS

In this model, we need to set up 15 paradigm types for Tamil pronouns, as in the following:

SL No.	Stem1/Suffix1 (Dict. entry)	Stem2/Suffix2	Stem3/Suffix3
1	avaL	avaL] ∅	avaL]0
2	avaM	avaM] 0	avaM] 0
3	avar	avar] 0	avar] 0
4	awu	aw] 0	aw] w
5	nAM	eM] 0	eM]M
6	nAfkaL	efkaL] 0	efkaL] 0
7	nI	uM] ∅	uM] M
9	nIfkaL	ufkaL] ∅	ufkaL] 0
10	nIr	um] ∅	urn] m
11	yAm	em] ∅	em] m
12	wAfkaL	wafkaL] 0	wafkaL] 0
13	wAm	warn] 0	warn] m

14	wAM	waM] 0	waM] M
15	nAm	nam] 0	nam] m

Table 7.7: Paradigm Types/Stem Variations for Pronouns in the AMPLE Analyzer

This comprises of 15 basic stems, 11 stem variants, 3 oblique case marker variants and 8 cases. The three oblique marker variants combine with one of the 8 different case suffixes. The total would then mean a sum of: 15 basic stems + 11 stem variants + 8 basic cases suffixes + 3 oblique markers (x 8 case suffixes) = 58 pronoun allomorphs.

7.1.2.4.3 NUMERALS

In this model, we need to set up 14 paradigm types for Tamil numerals, as in the following:

SL No.	Stem1/Suffix1 (Dict. entry)	Stem2/Suffix2	Stem3/Suffix3	Stem4/Suffix4
1	oMRu	oMR] ∅	oru] v	oMR] Am
2	iraNtu	iraNt] 0	iru] v	iraNt] Am
3	mUMRu	mUMR] ∅	mU] v	mUMR] Am
4	nAMku	nAMk] ∅	nAl]v	nAMk] Am
5	Ynwu	Ynw] 0	Y] v	Ynw] Am
6	ARu	AR] ∅	aRu] v	AR]Am
7	EZu	EZ] ∅	eZu] v	EZ]Am
8	ettu	ett] ∅	eN]m	ett] Am
9	oMpawu	oMpaw] 0	oMpawu] 0	oMpaw] Am
10	pawwu	paww | 0	pawwu] 0	paww] Am
11	nURu	nUR] R	nURu | ∅	nUR] RAm
12	Ayiram	Ayira] ww	Ayiram] 0	Ayira] wwu
13	latcam	latca] ww	latcam] 0	latcaw] wwu
14	kOti	kOti] y	kOti] ∅	kOti] ∅

Table 7.8: Paradigm Types/Stem Variations for Numerals in the AMPLE Analyzer

This comprises of 14 basic stems, 13 stem variants (for case and ordinality), 3 ordinaliry marker variants, 2 GNP marker variants, 4 GNP suffixes, 3 oblique case marker variants and 8 cases. The three oblique marker variants combine with one of the 8 different case suffixes. The total would then mean a sum of: 14 basic stems + 13 stem variants + 3 ordinality suffixes + 2 GNP marker variants (x 1 GNP suffix) + 3 GNP suffixes + 8 basic cases suffixes + 3 oblique markers (x 8 case suffixes) = 67 numeral allomorphs.

7.1.2.4.4 VERBS

In this model, we need to set up 24 paradigm types for Tamil verbs, as in the following:

SL No.	Base1/Suffix1 (Dict. Entry)	Base2/Suffix2 (Past)	Base3/Suffix3 (Present)	Base4/Suffix4 (Future)	Base5/Suffix5 (Non-finite)
1	Aku	A] M	A] kiR	A l v	Ak] a
2	AL	A N]t	**AL** | kiR	AL]v	AL]a
3	aZu	aZu] w	aZu] kiR	aZu] v	aZ]a
4	cA	ce | ww	cA] kiR	cA] v	cA]ka

5	cel	ceM] R	cel] kiR	cel] v	cel]la
6	cey	cey] w	cey]kiR	cey] v	cey]ya
7	col	coM] M	col] kiR	col] v	col] la
8	eM	eM] R	eM] kiR	eM] p	eM]a
9	ikaZ	ikaZ] nw	ikaZ] kiR	ikaZ] v	ikaZ] a
10	iru	iru] nw	iru] kkiR	iru] pp	iru] kka
11	kAN	kaN] t	kAN] kiR	kAN]p	kAN] a
12	kEL	kEt]t	kEt] kiR	kEt] p	kEt]ka
13	koL	koN]t	koL] kiR	koL]v	koL] La
14	nil	niM] R	niR] kiR	niR] p	niR] ka
15	nO	no] nw	nO] kiR	nO]v	nO] ka
16	pan	pati]ww	pati] kkiR	pati] pp	pati] kka
17	peRu	peR] R	peRu] kiR	peRu] v	peR]a
18	pO	pO]M	pO] kiR	pO] v	pO] ka
19	pOtu	pOt] t	pOtu] kiR	pOtu] v	pOt] a
20	pUN	pUN] t	pUNu] kiR	pUNu] v	pUN] a
21	uN	uN] t	uN] kiR	uN] p	uN] Na
22	vA	va] nw	varu] kiR	varu] v	var] a
23	viZu	viZu] nw	viZu] kiR	viZu] v	viZ] a
24	wUfku	wUfk] iM	wUfku] kiR	wUfku] v	wUfk] a

Table 7.9: Paradigm Types/Stem Variations for Verbs in the AMPLE Analyzer

This would yield 24 basic roots, 33 stem variants (14 past tense, 5 present tense, 5 future tense, 9 non-finite), 7 past tense suffix marker variants, 2 present tense suffix markers, 3 future tense suffix markers, 7 infinitive suffix variants, 7 (x 9) non-finite based suffix variants and 7 (x 4) past tense based suffix variants, 2 (x 1) present tense based suffix variants and 1 future tense suffix. The total would then mean a sum of: 24 basic roots + 33 stem variants + 12 tense markers + 7 infinitive markers + 63 non-finite based suffix variants +31 finite/tensed based suffix variants = 170 verb allomorphs.

7.1.2.4.5 ADJECTIVES

In this model, we need to set up 2 paradigm types for Tamil adjectives, as in the following:

SL No.	Stem1/Suffix1 (Dict. Entry)	Stem2/Suffix2	Stem3/Suffix3
1	nalla	nalla] 0	nalla] v
2	puwu	puw] iya	puwiya] v

Table 7.10: Paradigm Types/Stem Variations for Adjectives in the AMPLE. Analyzer

This comprises of 2 basic stems, 1stem variants, 1 augment suffix, 1 GNP marker and 3 GNP suffixes. The total would then mean a sum of: 2 basic stems + 1 stem variants + 1 augment + 1 GNP suffix + 1 GNP marker (x 3 GNP suffixes) = 8 adjective allomorphs.

7.1.2.5 Implementing the AMPLE Model

AMPLE essentially has two dictionaries, one for the roots, and another for suffixes of the language. Since AMPLE largely works on the Item and Arrangement model of morphology, the database involves a long listing of all the allomorphs of Tamil in each of the respective

lexicon files. A few examples from the lexicon files are reproduced here The format of the root dictionary for Tamil is as follows:

\id tamroot.dic root dictionary

\r	Record marker
\a	Allomorph
\c	Category pair from/to
\mp	Morpheme property
\ge	English Gloss
\co	Comment
\noload	Do not load
\nocap	No caps change

Example 1: Noun

\r	maram	
\a	maram	+/_~Plr.num
\a	maraf	+/_Plr.num
\a	mara	+/_~Plr.num
\c	Noun	
\ge	tree	

Example 2: Verb

V	Aku	
\a	Aku	
\a	A	/_~k(non-past)
\a	Ak	
\c	Verb	
\ge	become	

Example 3: Numeral

\r	oMRu	
\a	oMRu	
\a	oMR	
\a	oru	+/_Pl.Obl
\c	Numeral	
\ge	one	
\mcc	one	

Example 4: Pronoun

\r	nI
\a	nI
\a	uM
\c	Pronoun
\ge	you(2S)

Example 5: Adjective

\r	puwu
\a	**puwu**
\a	puw
\c	**Adjective**
\ge	**new**

The format of the suffix dictionary for Tamil is as follows:

\id tamsuff.dic suffix dictionary

\s	Record marker
\a	Allomorph
\c	Category pair from/to
\mp	Morpheme property
\ge	English Gloss
\co	Comment
\noload	Do not load
\nocap	No caps change

Example 1: Number

\s kaL
\a kaT. /~[Vlg]_
\a kkaL /[Vlg]_
\c Noun/Noun
\ge Plr.num

Example 2: Case

\t Al
\« Al /~[V]_
\a RA1
\a yAl
\a NA1
\a tAl
\a wwAl
\a LAl
\a MAl
\a lAl
\a vAl
\a mAl
\c Noun/Noun Pronoun/Pronoun
\ge Instr.cs

Example 3: Hortative

\s alAm
\a alAm
\a lalAm
\a kalAm
\a yalAm
\a kkalAm
\a l al Am
\a NalAm
\c Verb/Verb

\ge Hort.

Example 4: Auxiliary Verb

\s pAr
\a pAr
\c Verb/Verb
\ge Aux.Vb2 +/Pos .Vbl.Ppl_

Example 5: GNP for Numerals

```
\s      wwl
\a      wwl
\c      Numeral/Numeral
\ge     3Sfnum.gnp
```

Example 6: GNP for Adjectives

```
\s      vaM
\a      vaM
\c      Adjective/Adjective
\ge     3SM.pe
```

In AMPLE the database comprises of a comprehensive list of all the stems and their suffixes, in all their allomorphic variations, along with string environment constraints, morpheme environment constraints and morpheme co-occurrence constraints, that function as combinatorial rules, or rather, contextual constraints, to prevent overgeneration.

On psycholinguistic lines, AMPLE's morphology does not fall within the framework of the string-scan models. It can be grouped rather with the category-split models, particularly in accordance with the Taft & Forster model. Scanning of a given string sequence proceeds from the left to the right. Suffixes are relatively more prone to allophonic/allomorphic changes than stems are, and therefore left-to-right parsing apparently resolves ambiguity a lot more simply.

In effect, 4 of the files in AMPLE have to be constructed anew, to set up a working model for Tamil. These are, the Root Dictionary file (XXRT01.TXT), Suffix Dictionary file (XXSF01.TXT), the Analysis Data file (XXAD01.CTL), and the Text Input Control file (XXINTX.CTL). The root and the suffix dictionaries consist of a list of the root and suffix allomorphs of all morphological classes in Tamil, respectively. String environment constraints, denoted by \sec, are encoded alongside relevant entries in the main dictionaries.

The set of dictionary field code changes for a root dictionary file begins with \root, optionally followed by the record marker field code for the root dictionary. Similarly, the set of dictionary field code changes for a suffix dictionary file begins with \suffix, optionally followed by the record marker field code for the suffix dictionary. Different types of fields are used in the different types of dictionary files. The mapping from the actual field codes used in the dictionary files to the type codes that AMPLE uses internally, is controlled by the dictionary code table file.

- Allomorph: Internal code A
- **Category:** Internal code C
- **Elsewhere allomorph:** Internal code E
- **Feature descriptor** Internal code F
- **Root gloss:** Internal code G
- **Infix location:** Internal code L
- **Morph name:** Internal code M
- **Internal code:** O
- **Morpheme property:** Internal code P
- **Morpheme type:** Internal code T

- **Underlying** form: Internal code U
- **Morpheme co-occurrence constraint:** Internal code *7.*
- Do not load: Internal code!

The Analysis Data file comprises of all the string classes and morpheme classes, that represent the phonological and morphological attributes of the lexical entries.

String classes comprise the phonemic inventory of the language. It is denoted by the \scl field code followed by the class name, which is followed in turn by one or more contiguous character strings. The individual members of the class are separated by spaces. Each \scl field defines a single string class, and any number of such fields may be used, provided each of them is defined before being used. The following are the string class names used for Tamil:

\sd	V	a A i I u U e E Y o O W	| Vowels
\scl	Vsh	a i u e o	| Short Vowels
\scl	Vlg	A 1 U F. O	| Long Vowels
\sd	Vhg	i I u U	| High Vowels
\sd	Vlw	a A o O	| Low Vowels
\sd	Vft	i I e F.	| Front vowels
\sd	Vbk	u U o O	| Back vowels
\sd	Vd	W Y	| Dipthongs
\sd	Nas	F f N n M m	| Nasals
\sd	G	v y	| Frictionless continuants
\scl	Liq	r l Z L	| Liquids
\sd	C	k c t w p R	| Obstruents

Morpheme classes are tags used to represent generic classes that encompass more than one subclass of inflections under them. Any constraint that applies to a particular tag, applies to all classes of inflections that form part of it. It is defined by the \mcl field code followed by the class name, which is followed in turn by one or more morpheme names. The following are the morpheme classes used for Tamil:

\mcl	GenAdv	Adv.Gen
\mcl	GenDatAdv	Adv.Dat/Gen
\mcl	PpnNom	Ppn.Nom
\mcl	PpnDat	Ppn.Dar
\mcl	PpnGen	Ppn.Gen
\mcl	PpnNomDat	Ppn.Nom/Dat
\mcl	PlNom	Pl.Nom
\mcl	PlAcc	Pl.Acc
\mcl	PlObl	Pl.Obl
\mcl	PastAdjPpl	Past.Adj.Ppl
\mcl	PresAdjPpl	Pres.Adj.Ppl
\mcl	Admon	Adm.
\mcl	AdjGNP	3SM.pe 3SF.pe 3S.hon.pe 3SN.pe
\mcl	VbGNP	1S.pe 1P.incl.pe 2S.pe 2S.hon.pe 2S.hon/2P.pe 3SM.pe 3SF.pe 3S.hon.pe 3SN.pe
\mcl	Aux1	Aux.Vb1
\mcl	Aux2	Aux.Vb2

Morpheme Environment Constraints and the Morpheme Co-occurrence Constraints tackle morphophonemics of a language. MECs specify' the environment in which a particular

morpheme may occur or not occur, while MCCs restrict the occurrence of a morpheme, or a group of contiguous morphemes in the presence or absence of certain other morphemic contexts. A morpheme co-occurrence constraint is defined by the \mcc field code followed by one or more morpheme names or morpheme class names and further, a morpheme environment constraint is defined by \mec. The following are the MF.Cs and MCCs used for Tamil:

```
\mcc   GenAdv          +/Gen2.cs_
\mcc   GenDatAdv       +/Gen2.cs_ +/Dat.cs_
\mcc   Past.tns        +/_~Inf. +/_VbGNP
\mcc   Pres.tns        +/_VbGNP +/_~Inf.
\mcc   Inf.            +/~Ptes.Adj.Ppl_
\mcc   AdjGNP          +/Obl.Qlf_
\mcc   Pos.Cndl        +/~3SM.pe_
\mcc   Adm.            +/VbGNP_ ;+/~Past.tns_
\mcc   Pres.Adj.Ppl    +/_~VbGNP
\mcc   Aux1            +/Inf._ +/_~Adm.
\mcc   Aux2            +/Pos.Vbl.Ppl_ +/_~Past.tns +/_~PastAdjPpl
```

Information concerning the case marking used in the associated script is to be specified in the Text Input Control file. The Text Input Control File determines how AMPLE reads rhe ìnput text files, and to some degree, the format of the output analysis files. It is structured as a 'standard format' database file.

7.1.2.6 Testing & Debugging

After the entire database has been all set, the process of testing the analyzer begins with an input through a file comprising of rhe list of words to be parsed. Word analysis progresses as in a set, when the batch analysis file (ANAI..BAT), is run, whereby each entry in the file then passes through a series of tests, and the output is rendered in a specified output file, indicating the outcome of the parse(s) in a particular format.

The 'trace' module would help understand the parsing mechanism, through a systematic description of the morphological decomposition of the input string that appears in the log file of the trace function, that is given as output. For an example, refer parse of a string, (say) *marafkaLYppaRRiyum*, section 8.6.3.

Naming rhe input and output files is merely a matter of choice, the only conditions being, that the file names are to be specified in the Analysis Command file (ANAI..CMD), and that the input file should have a '.SFM' extension and the output file, a '.ANA' extension.

7.1.2.7 Output Samples

Entries in the input file can be fed in a linear order, each separated by spaces. The analyzed output would be something as illustrated below:

1) kAttYccuRRimattumA

is analyzed as:

```
\a < Noun forest > Acccs Ppn.Acc Restr.Cl Intrg1.Cl
\d kAt-tY-ccuRRi-mattum-A
\w kAttYccuRRimattumA
```

2) *ufkaLOtuwAME*
is analyzed as:
\a < Pronoun you(2P/2S.hon) > Soc1.cs Emph2.Cl Emph1.Cl
\d ufkaL-Otu-wAM-E
\w ufkaLOtuwAME

3) *ettEmukkAlwAMO*
is analyzed as:
\a < Numeral eight > Pl.Qnt Emph2.Cl Intrg2.Cl
\d ett-EmukkAl-wAM-O
\w ettEmukkAlwAMO

4) *ceyyamA ttirkaI A*
is analyzed as:
\a < Verb do > Neg.Fut 2S.hon/2P.pe Intrg1.Cl
\d cey-yamAtt-IrkaL-A
\w ceyyamAttIrkaLA

5) *puwiyavaL*
is analyzed as: \a < Adjective new > Bd.Qlf 3SF.pe
\d puw-iya-vaL
\w puwiyavaL

A zero in the analysis field, as in the following example, indicates a failure in parse. The input string *maNkaL*, is not a valid string in Tamil. The output analysis for this word form is therefore shown as a failure:

\a %0%maNkaL%
\d %0%maNkaL%
\w maNkaL

Multiple parses are indicated by numbers in the analysis field, according to the number of analyses.

7.1.3 THE KIMMO ANALYZER

Two-level phonology traces its linguistic heritage to "classical" generative phonology as codified in The Sound Pattern of English (Chomsky and Halle 1968). The phonologist C. Douglas Johnson (1972) showed that the SPE theory of phonology could be implemented using finite state devices by replacing sequential rule application with simultaneous rule application. At its core, then, two-level phonology is rule formalism, nor a complete theory of phonology. One feature that rwo-level phonology shares with classical generative phonology is linear representation. That is, phonological forms are represented as linear strings of symbols. This is in contrast to the nonlinear representations used in theories like autosegmental and metrical phonology. On the computational side, two-level phonology is consistent with natural language processing systems that are designed to operate on linear orthographic input.

As a processor, Kimmo involves both generation and analysis. Analysis involves a surface form as input, over which a rule applies, considering the relevant correspondence in the lexicon, and the parsed output, the lexical form along with its gloss. The same set of bi-directional rules apply reversibly for morphological generation. Kimmo is implemented as a finite state machine. Rules and Correspondences are translated as Finite State Transducers (FST) in the rule file, and as Finite State Auromara (FSA) in the lexicon file.

7.1.3.1 Theory and Implementation

A preview of the transformational nature of rules of generative phonology is vital to the understanding of the functioning of two-level rules. Three theoretically important features are to be considered:

1) Transformational / Processual / Re-write rules
2) Sequential rules
3) Ordered rules (the description specifying the sequence in which the rules must apply)

Although theoretically grounded in generative phonology, two-level rules are decidedly distinct from generative rules in the following ways:

Ordering: whereas generative rules apply in a sequential order, two-level rules apply simultaneously, better described as applying in parallel.

Levels of Representation: whereas sequentially applied generative rules create intermediate levels of derivation, simultaneously applied two-level rules require only two levels of representation: the underlying or lexical level and the surface orthographic level.

Correspondences: whereas generative rules relate the underlying and surface levels by rewriting underlying symbols as surface symbols, two-level rules express the relationship between the underlying and surface levels by positing direct, static correspondences between pairs of underlying and surface orthographic symbols. Whereas generative rules have access only to the immediate form at each stage of the derivation, two-level rules have access to both underlying and surface environments.

Rules: in generative phonology, rules apply in a certain sequential order and control the interaction between a pair of rules.

In two-level phonology, rule interactions are controlled not by ordering the rules but by carefully specifying their environments as strings of rwo-level correspondences. Whereas generative, rewriting rules are often unidirectional (that is, they operate most often in an underlying to surface direction), two-level rules are bi-directional. Two-level rules can operate either in an underlying to surface direction (generation mode) or in a surface to underlying direction (recognition mode).

7.1.3.2 Formalism and Construct

The Two Level Approach

The two-level model treats the relationship between the underlying form and the surface form as a direct, symbol-to-symbol correspondence. Each pair of lexical and surface symbols is a correspondence pair denoted with the notation <underlying symbol>:<surface symbol>. A two-level rule has three parts: the correspondence, the operator, and the environment.

The model is based on the traditional distinction between *morphotactics* (which enumerates the inventory of morphemes and specifies in what order they can occur), and *morphophonemics* (which accounts for alternate forms or 'spellings' of morphemes according to the phonological context in which they occur).

Conceptually, a two-level phonological description of a data can be understood as follows. First, the two-level description declares an alphabet of all the segmental

orthographic inventory used in the data in both underlying and surface forms. Second, the description declares a set of feasible pairs, which is a complete set of all underlying-to-surface correspondences of segments that occur in the data. The set of feasible pairs for a specific data set is the union of the set of default correspondences, whose underlying and surface segments are and the set of special correspondences, whose underlying and surface segments are different.

A different implementation of Kimmo Koskenniemi's model in LISP is one developed by Lauri Karttunen (Karttunen 1983). The following figure illustrares this model:

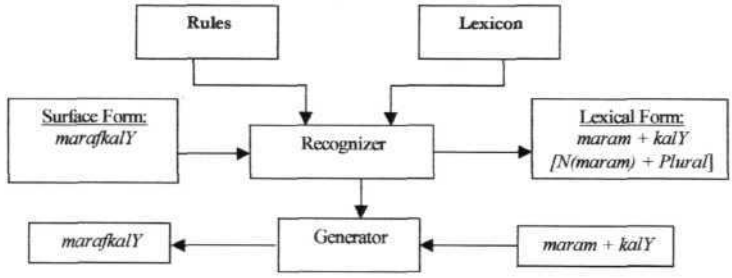


Figure 7.1: Karttunen's Implementation of KIMMO in LISP

The Finite State Technology

Kimmo is fashioned on the mechanics of what can be termed as the 'Finite State Technology'. The finite-state mechanics works on crucial sub-machinery such as automatons and transducers. Information from these, have to be converted to a machine-readable coding through a finite-state table.

A Finite State Machine during analysis scans a morphological string, examining each character for its positional co-occurrence validity, progressing each character at a time, until the string is exhausted. If during this process, progress fails; 'backtracking' is adopted as a strategy to fulfill the requirements of the rules of the grammar, specified. The machine follows another path in order that the scan is successful.

A Finite State Automaton (FSA) or a Transducer (FST), constitutes a number of srates and transition arcs that connect these states. Traversing arcs from one state to another does the recognition of a string. Initial and Final states mark the beginning and end of input strings. The correspondence between 'lexical' and 'surface' forms can be directly established, and the validity of the strings checked, by the list of constraints imposed by the specified list of 'default' and 'special' correspondences. An FSA or and FST, behave in a similar fashion, the only difference being, an FSA operates on a single input string at a time, while an FST can operate on a pair of input strings simultaneously.

The State Transition Table is an alternative representation of an FSA/FST in a technical format as input to the parser. All correspondences in a state table are listed as column headers. The table is so constructed that the entire set of feasible pairs in the description is

partitioned among the column headers with no overlap. The columns represent the transition arcs from one state to the other. The number of states present is denoted by the rows of the table, each numbered and marked as finite or non-finite; final states being marked with a colon, the non-finite ones, with a period. The cells at the intersection of a row and a column indicate which state to make a transition to, if the input symbol matches the column header. Zero in a cell indicates that there is no valid transition from that state for that input symbol. When an input string is exhausted, it reaches the final state and any input symbol that follows it, is not accepted.

7.1.3.3 Framework for the KIMMO Model

RULES AND THE LEXICON

Two kinds of analytical databases are involved - the 'Rules' and the 'Lexicon'. The two-level rules accounted for regular phonological or orthographic alternations. The lexicon lists all morphemes (stems and affixes) in their lexical form and specified morphotactic constraints.

The general structure of the rules file is a list of declarations composed of a keyword followed by data. The set of valid keywords in a rules file includes COMMENT, ALPHABET, NULL, ANY, BOUNDARY, SUBSET, RULE, and END. The COMMENT, SUBSET and RULE declarations are optional and also can be used more than once in a rules file. The END declaration is also optional, but can only be used once.

Rules must be written to account for correspondences between the lexical representations and the surface representations. For example, the two-level rule for the *m:f* correspondence looks like this:

m:f0_(+:0)k

The rule is to be read as /m/ alternates with /f/ before a following /k/ preceded by or separated from the earlier string by a morpheme boundary.

The environment of the rule is also specified as a string of two-level correspondences. The structure of any rule specification entry would be as follows:

```
ALPHABET
a A i I u U e E Y o O W k c t w p R F f N n m M y r L v Z l +
NULL 0
ANY @
BOUNDARY #
SUBSETV  a A i I u U e E Y o O W ; vowels
SUBSET Co k c t w p R ; obstruents
SUBSET Cf  t p R ; front consonants
SUBSET Cn  F fN n m M ; nasals
SUBSET Cs y r I. v Z l ; sonorants (non-nasals)
SUBSET Cc y  L l ; continuants
SUBSET Vlg A U I E O ; long vowels
SUBSET Vsh a i u e o ; short vowels
SUBSET Vft Y i I y ; front vowels
SUBSET Vbk U; back vowels
SUBSET Vbl A O U ; back long vowels
```

RULE "1 Consonant defaults" 1 19

	k	c		t	w	p	R	F		f	N	n	m	M	y		r	L	v	Z		1	@	Surface
	k	c		t	w	p	R	F		f	N	n	m	M	y		r	L	v	Z		1	@	Underlying
1	:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			

RULE "2 Vowels and other defaults" 1 13

	a	A	i	I	u	U	e	E	Y	o	O	W	@	Surface
	a	A	i	I	u	U	e	E	Y	o	O	W	@	Underlying
1:	1	1	1	1	1	1	1	1	1	1	1	1	1	

A lexicon consists of one main lexicon file plus one or more files of lexical entries. The general structure of the main lexicon file is a list of keyword declarations. The set of valid keywords is ALTERNATION, FEATURES, FIELDCODE, INCLUDE, and END.

The lexicon file is of use only during the process of morphological analysis. Other information like the lexical form, the morphological constraints, and the gloss associated with each lexical item are represented. Several sub-lexicons constitute the main lexicon. Different allomorphic restrictions classify lexical entries (in the main lexicon), under different groups.

7.1.3.4 Allomorphy

The subject of allomorphy does not arise in the context of Kimmo, since almost all instances of phonological and morphophonemic changes are handled by the rule component of Kimmo. Hence the best way to restate morphology in terms of the TP model would be to enlist all classes of the paradigm per se, leaving *Sandhi* variations to be stated by rules in the Kimmo rule file. The theoretical set of paradigms consequently needs to be changed for reasons of implementation. As it were, all morphemes have a single underlying morpheme from which other variants are derived through two level rules of morphology.

7.1.3.4.1 NOUNS

In this model, we need to set up 24 paradigm types for Tamil nouns, as in the following:

Sl. No.	Stems
1	AN
2	Aru
3	eli
4	ilY
5	iwaZ
6	I
7	kaN
8	kAl
9	kAtu
10	maMiwaM
11	maram
12	muL
13	mAM
14	narampu
15	nAy

16	poM
17	poy
18	pul
19	poruL
20	pU
21	vaNtu
22	wEr
23	wOL

Table 7.11: Paradigm Types/Stem Variations for Nouns in the KTMMO Analyzer

This includes 23 basic stems, 8 case suffixes and 1 number suffix. The total would be: 23 + 8 + 1 =32 noun allomorphs.

7.1.3.4.2 PRONOUNS

In this model, we need to set up 15 paradigm types for Tamil pronouns, as in the following:

SL No.	Stem
1	avaL
2	avaM
3	avar
4	awu
5	avE
6	nAM
7	nAfkaL
8	nI
9	nIfkaL
10	nIr
11	yAm
12	wAfkaL
13	wAm
14	wAM
15	nAm

Table 7.12: Paradigm Types/Stem Variations for Pronouns in the KTMMO Analyzer

This includes 15 basic stems and 8 case suffixes. The total would be: 15 + 8 = 23 pronoun allomorphs.

7.1.3.4.3 NUMERALS

In this model, we need to set up 14 paradigm types for Tamil numerals, as in the following:

SL No.	Stems
1	oMRu
2	iraNtu
3	mUMRu
4	nAMku
5	Ynwu

6	ARu
7	EZu
8	ettu
9	oMpawu
10	pawwu
11	nURu
12	Ayiram
13	latcam
14	kOti

Table 7.13: Paradigm Types/Stem Variations for Numerals in the KTMMO Analyzer

This includes 14 basic stems, 1 number suffix, 8 case suffixes, 1 ordinality suffix and 3 GNP suffixes. The total would be 27 numeral allomorphs.

7.1.3.4.4 VERBS

In this model, we need to ser up 24 paradigm types for Tamil verbs, as in the following:

SL No.	Stems
1	Aku
2	AL
3	aZu
4	cA
5	cel
6	cey
7	col
8	eM
9	ikaZ
10	iru
11	kAN
12	kEL
13	koL
14	nil
15	nO
16	pati
17	peRu
18	pO
19	pOru
20	pUN
21	uN
22	vA
23	viZu
24	wUfku

Table 7.14: Paradigm Types/Stem Variations for Verbs in the KTMMO Analyzer

This includes 24 basic stems, 7 past tense suffixes, 1 present tense suffix, 2 future tense suffixes, 1 infinitive suffix, 13 non-finite suffixes and 6 finite suffixes. The total would be: 54 verb allomorphs.

7.1.3.4.5 ADJECTIVES

In this model, we need to set up 2 paradigm types for Tamil adjectives, as in the following:

Sl. No.	Stems
1	nalla
2	puwu

Table 7.15: Paradigm Types/Stem Variations for Adjectives in the KIMMO Analyzer

This comprises of 2 basic stems, 1 augment and 4 GNP suffixes. The total would then mean a sum of 6 adjective allomorphs.

7.1.3.5 Implementing the KIMMO Model

Kimmo focuses more on the set of phonological rules provided rather than the lexicon of the language. Tt follows an inductive approach. A small set of data is given that exemplifies certain phonological alternations and rules to account for it are constructed. Then the data is expanded to include exceptional cases, forcing revision of the rules. Finally, as more are added to account for the other alternations, interactions with previously written rules may require that the rules be revised in order to operate together correctly.

The Kimmo parser constitutes 2 vital components: the Rule file and the Lexicon file(s).

In accordance with the language concerned, the Rule file of the Kimmo component needs a setting up of the Alphabet, and the Subset(s).

The rule file must first declare the alphabet. The Alphabet comprises the total set of both the lexical and surface characters to be used by the rules and the lexicon. The ALPHABET declaration most often occurs first in the file. It is followed by any number of lines of symbols, each separated by at least one space. The Alphabet for Tamil consists of 30 characters, excluding the morpheme boundary symbol:

a A i I u U e E Y o O W k c t w p R F f N n m M y r L v Z l +

There are certain instances that require characters that are not part of the Alphabet. The NULL (empty or zero) symbol used in instances of deletion, is declared as 0 (zero). Similarly, the ANY ("wildcard") symbol is declared as @, and the BOUNDARY (word boundary) symbol is indicated by #

Subsets are lists of phonetically or phonologically categorized characters used in a language. It may be recalled that this is similar to the Paninian Maheshwara Sutras, the metarules for phonological categorization of phonemic inventory based on their participation in rule/sandhi. These are language-specific. A subset declaration is composed of the keyword SUBSET followed by a subset name followed by a list of subset characters. A subset name can be any alphanumeric string (one or more characters, no spaces) so long as it is unique; that is, it cannot be a single character already declared in the alphabet. All characters defined, as belonging to a subset must also be in the complete alphabet.

The Tamil Rule file uses the following 11 subsets:

```
SUBSETV  a A i I u U e E Y o O W ; vowels
SUBSET Co  k c t w p R ; obstruents
SUBSET Cf  t p R ; front consonants
SUBSET Cn  F f N n m M ; nasals
SUBSET Cs  y r l . v Z 1 ; sonorants (non-nasals)
SUBSET Cc  y L l ; continuants
SUBSET Vlg  A U I E O ; long vowels
SUBSET Vsh  a i u e o ; short vowels
SUBSET Vft  Y i I y ; front vowels
SUBSET Vbk  U ; back high vowels
SUBSET Vbl  A O ; back low vowels
```

A rule declaration is composed of the keyword RULE followed by the rule name, number of states, number of columns, and the state table itself. The rule name is enclosed in a pair of identical delimiter characters such as double quotes. The number of states (rows in the table) that will be defined here, must begin at 1 and go in sequence through the number defined as the final state. The number of columns is the number of state transitions (columns in the table) that will be defined for each state. The rule name has no effect on the operation of the table. It is also useful to include a sequence number for each rule, as rules are referred to by number, in some of the diagnostic displays for rule debugging. The default rules are stated first for reasons of clarity. Tamil has had to use about 13 rules, to tackle a large part of its phonotactics and morphotactics. The default rules in Tamil are:

RULE "1 Consonant defaults" 1 19

	k	c	t	w	p	R	F	f	N	n	m	M	y	r	L	v	Z	1	@	Surface
	k	c	t	w	p	R	F	f	N	n	m	M	y	r	L	v	Z	1	@	Underlying
1:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

RULE "2 Vowels and other defaults" 1 13

	a	A	i	I	u	U	e	E	Y	o	O	W	@	
	a	A	i	I	u	U	e	E	Y	o	O	W	@	Surface
	a	A	i	I	u	U	e	E	Y	o	O	W	@	Underlying
1:	1	1	1	1	1	1	1	1	1	1	1	1	1	

Sandhi rules in nouns show up in inflections of number and case. The following is a model of Kimmo adaptation for Tamil nouns, explaining correspondences and rules that handle nominal inflections. For example, the process of Gemination can be defined in Tamil by a rule like:

RULE "3 Gemination, 0:{k,l,y,L,N,M} ⇒ {Vbl,l,y,L,N,M} (+:0)___" 7 14

	Vbl	I	1	L	N	M	+	0	0	0	0	0	to	
	Vbl	I	y	1.	N	M	0	k	1	y	1.	N	@	Underlying
b	2	3	4	5	6	7	1	0	0	0	0	0	1	
2:	2	3	4	5	6	7	2	:	0	0	0	0	1	
3s	0	3	4	5	6	7	3	0	1	0	0	0	1	
4:	2	a	4	5	6	7	4	0	0	1	0	0	1	
5:	2	3	0	S	6	7	5	0	0	0	1	0	1	
6:	2	3	4	0	6	7	6	0	0	0	0	1	1	
7:	2	3	4	5	0	7	7	0	0	0	0	1	1	

The rule explains that either of the segments *l, y, L, N* or *M* realize after a morpheme boundary, if the final segment of the preceding word ends in any of their corresponding geminates. This accounts for gemination in the case of glides, liquids and nasals.

Apart from the main lexicon Tamil.Lex, 14 lexicon files have been used for Kimmo. These can be regarded as the root and the relevant suffix lexicons for each of the word classes in Tamil. They are:

- Noun_Root.Lex

This is the main lexicon for noun roots. It has 23 entries, as given in the paradigm.

- Pronoun_Root_Lex

This is the main lexicon for pronoun roots. It has 15 entries, as given in the paradigm.

- Numeral_Root.Lex

This is the main lexicon for numeral roots. It has 14 entries, as given in the paradigm.

- Adjective_Root.Lex

This is the main lexicon for adjective roots. It has 2 entries, as given in the paradigm.

- Verh_Root.Lex

This is the main lexicon for verb roots. It has 24 entries, as given in the paradigm.

- Number.Lex

This is the lexicon for number inflections in nouns and numerals. It has 2 entries, for the singular and the plural, although the singular is an unmarked entry.

- Case.Lex

This is the lexicon for case inflections in nouns, pronouns and numerals. It has 9 entries for the nominative, accusative, dative, sociative, genitive, locative, instrumental, benefactive and the ablative cases.

- Tense.Lex

This is the lexicon for verbal inflections at the level of tense, aspect and modality. It has a total of 43 entries - 7 for the past tense, 1 for the present tense, 2 for the future tense, 1 for the infinitive, 1 for the negative past, 1 for the negative future, 1 for the hortative, 1 for the prohibitive, 1 for the admonitive, 7 for the past adjectival participle, 1 for the present adjectival participle, 1 for the negative adjectival participle, 1 for the habitual participle, 7 for the positive verbal participle, 1 for the negative verbal participle, 7 for the positive conditional, 1 for the negative conditional and 1 for the durative conditional.

- Noun_Inflections.Lex

This is the lexicon for nominal and pronominal inflections that includes adverbials, postpositions and particles. It has 27 entries for adverbials, 13 for postpositions and 9 for panicles; a total of 49 entries.

- Numeral_Inflections.Lex

This is the lexicon for numeral inflections that includes adverbials, postpositions, particles and GNP suffixes. It has 3 entries for adverbials, 10 for postpositions, 19 for particles and 4 for GNP suffixes; a total of 36 entries.

- Verh_Inflections.Lex

This is the lexicon for verbal inflections that includes adverbials, particles, auxiliary verbs and GNP suffixes. It has 12 entries for adverbials, 17 for particles, 23 for auxiliary verbs and 14 for GNP suffixes; a total of 72 entries.

- Adjective_Inflections.Lex

This is the lexicon for adjectival inflections that includes postpositions, parades and GNP suffixes. It has 2 entries for postpositions, 3 entries for particles and 5 for GNP suffixes; a total of 10 entries.

This is the lexicon for a specific set of 3rd person GNP inflections, or rather, personal endings that apply to both verbs and adjectives. This includes a total of 5 entries.

- Common_Inflections.Lex

This is the lexicon for a set of inflections that apply to all grammatical classes, i.e., nouns, pronouns, numerals, verbs and adjectives. It has a total of 15 entries - 8 for functional/grammatical clitics and 7 for expressive vocatives.

7.1.3.6 Testing & Debugging

The cataloguing once done, the application (pckimmo.exe) can be run to test the analyzer. The rule file is loaded first, and then, the lexicons. The analyzer module is then run. To view the progress of the parse, the 'tracing' module is set on. The 'trace' module would help understand the parsing mechanism, through a systematic description of the morphological decomposition of the input string that appears in the log file of the trace function, that is given as output. To illustrate the analysis of a string, (say) *marafkaLYppaRRiyum*, refer section (Conclusions).

The word form that needs to be analyzed is given as input, for which a parsed output is displayed as in 7.1.3.7.

7.1.3.7 Output Samples

Examples of analyzed word forms are illustrated below:

1) *kAttYcuRRimattumA* is analyzed as:
kAtu + Y + cuRRi + mattum + A
[Noun (kAtu) + SG + ACC + Adv.Acc + Restr.Cl + Inter.Cl]

2) *ufkaLOtuwAME* is analyzed as:
ufkaL + Otu + wAM + E
[Pronoun (nIfkaL) + SOC + Emph2.Cl + Emph1.Cl]

3) *ettEmukkA lO* is analyzed as:
ettu + EmukkAl + wAM + O
[Numeral (ettu) + Pl.Qnt + Emph2.Cl + Intrg2.C.l]

4) *ceyyamA ttIrkaLA* is analyzed as:
cey + amAtt + Irkal + A
[Verb (cey) + Negative Future + 2S.hon/2P.pe + Inter.Cl]

5) *puwiyavaL* is analyzed as:
puwu + iya + vaL
[Adjective (puwu) + Adj.Bd. + Aug. + 3SF.gnp]

An unrecognized form is indicated as *** NONE *** in the output. The input string *maNkaI* is not a valid one in Tamil. The output analysis for this word form is therefore shown as failure in output.

Multiple parses are indicated by numbers in the analysis field, according to the number of analyses.

7.1.4 Other Morphological Analyzers

7.1.4.1 **TAGTAMIL**

Morphological parsing in *TagTamil* (Renganarhan 1998) is based on the framework of Lexical phonology. The description of the morphological nature of Tamil is in terms of level ordering wherein, the operation of inflectional processes falls under level-2 and level-3 suffixes, as stem changing vs. stem maintaining and, grammatical role changing vs. grammatical-role maintaining suffixes.

TagTamil, defines a nominal structure as:
Noun + oblique suffix + plural + case + conjunctive suffix + interrogative suffix
According to TagTamil, a verbal structure has the following order:
Verb + tense/ infinitive/ adverbial participle suffix + aspectual forms + (person, number and gender)/ relative participle marker + participial forms.

The model makes use of a database, a full list of all the root and inflectional forms in Tamil. Affixes being distinguished as either belonging to the morpheme boundary or word boundary type, the base forms of junctures that involve sandhi, are stored as pairs of alternants that constitute a paradigm class. Secondly, it involves a component that involves a complete listing of all the phonological and morphophonemic rules in Tamil. Thirdly, it makes use of a component for index marching, allotting a unique index to a particular inflection that marks a specific paradigm class. Analysis therefore involves a right to left scan of an input string that is searched for among the pairs of base endings, as in the database. Suffixes are stripped, based on class ordering.

Nouns and verbs are tackled by different modules, based on their morphological requirements. TagTamil theoretically defines the primary inflections for a noun as number, case and clitics, and the chief verbal inflections tense and aspectual forms, GNP suffixes, and participial forms.

Further information on this morphological tagger could not be obtained.

7.1.4.2 THE 'API' ANALYZER

To have a practical understanding of the nature of the model, the developers of the API analyzer were personally contacted. No information however could be procured beyond what theoretically can be reproduced here.

The API morphological analyzer claims a twofold focus - first, one of inflectional stripping, and the second, of deciphering syntactic information. The model involves a constructor, to load the root and suffix dictionaries and the state table. The input string is first checked for its validity of the root constituent, and then split using an automata table. The resultant morphemes with their grammatical tags are stored in the constructor.

The principle of splitting a word is based on a specified delimiter. The input string along with the delimiter are said to be passed on as arguments to a method split. That part of the string that finds a possible match in the lexicon is returned as a tagged morpheme. After splitting the case marker from the stem using the automata table, the stem is stripped off the

sandhi characters. A match is searched for in the stem list. If not found, the sandhi charcters are substituted by the base ending. The suffix dictionary includes the morpheme along with its category information. What is stored as a morpheme here, is that part of the split that is retrieved from a state-table. This is then tagged. The state table for Tamil follows Rajendran's (1998) chart of analysis. The table explains the paths needed to decompose the morphemes of an input word-form from right to left. The implementation is an approach based on a finite automaton
state table.

The following describes the steps carried out in sequence:

- BEGIN: The state of the machine is set to be 0.0
- ROOT: Is the word in the dictionary? (Such dictionary words are called root words) If so, we are done, go to FINISH: ("root.java")
- MORPHEME: Find the longest (inflectional) morpheme at the end of the word. These morphemes are listed in the file "stateable.dat". If no such morpheme is found, goto SANDHI:
- If a morpheme is found, remove it from the end of the word and go to ROOT:

As has already been said, the sandhi component seems to be not very efficient. Moreover, the analyzer seems not to be cost-effective, since it involves a large number of components. Further, the tagging scheme in use seems to lack uniformity.

7.1.4.3 THE GS MORPH

A recent description of Tamil verbs discussed in Cruz (2002) underlie a computational model of morphological processing termed as the Grapheme Oriented Structuralist Morphological Processor (GSMorph), as based on the IA model, an improvement over the 'naive model', which is discussed in Sengupta (1997). This implementation of Tamil concerns with verbs only.

The root and suffix lexicons of the morph comprise the citation forms or 'lexemes', their gloss, marked by an arbitrary index of numbers. An item marked by a specific number in a lexicon can concatenate with an item marked by the same number in the other lexicon. The processor, based on the IA model of morphology, functions on the mechanism of index matching; all allomorphic variants of roofs and the suffixes are listed, marked by numerical tags. Tags from the root lexicon that match those in the suffix lexicon are rendered permissible and concatenation is thus done.

What has been considered, as a root is the maximal initial sub-string common to all the words in the paradigm. A revised version of the model presumes what it would call a suffix would be the point in the word till where there is any grammatical information in the word. However considering the fact that Tamil is agglutinative, what has actually been resorted to, is a shift from the string-sequence to root/suffix allomorphy.

Considering the *tamiṉF-piṉaiviṉF* distinction of classical grammar that roughly corresponds to the pair of transitive vs. intransitive, or, causative vs. non-causative, both members of the pair are represented as a single lexical entry. Morphophonemically however, they are shown to fall under different paradigms, and therefore given distinct glosses and numerical indexes.

An entry in the root lexicon is listed as[2]:

Root Entry

10a col :	col "say,tell": 8	
b coll:	col "say,tell": b	
c con:	col "say,tell": c	

Suffix Entry

11.a ven:	+v+en	+fut+1s:	28ehl
b ikkontirukkiren:	+ik+kontiru+kkiren	+vbp+cont+pr+1s:	7b
c nen:	+n+en	+pt+1s:	ch

The verb *col* "say,tell" has three allomorphs in the root file. The suffixes listed in the suffix lexicon are the corresponding formatives the entries can take. It has been observed that in order to reduce the size of the suffix lexicon, allomorphy has been induced, in cases where it does not naturally happen.

The verbal paradigm for this model of morphological processing involves a classification based on allomorphy exhibited in the tense formation (Past, Present and Future), in the verbal participal and infinitival forms. The numbers of classes listed in the paradigm include 26, which are as follows:

Sl.No.	Root	Pst	Pr	Fut	Vbp	Inf	imp	class
1.	alYYu	w	kirY	v	wu	ka	0	1
2.	AlY	-	kirY	v	-	a	0	2
3.	ceVl	-	kirY	vAr	-	-	0	3
4.	acE(wwal)	ww	kkirY	pp	wwu	kka	0	4
5	acE(nwal	nw	kirY	v	nwu	ya	0	5
6	vilYYu	nw	kirY	v	nwu	-	0	6
7	akav	inY	kirY	v	i	a	U	7
8	akal	-	kirY	v	nYrYu	a	U	8
9	veN	rY	-	-	rYu	-	-	9
10	iru	nw	kirY	pp	nwu	kka	0	a
11	coVnY	nY	-	-	-	-	-	b
12	akappat	t	ukirY	uv	tu	a	u	c
13	coVll	-	-	-	i	a	U	d
14	po	nY	kirY	v	V	-	0	e
15	peVrVrY	rY	kirY	v	rYu	a	U	f
16	ikalYY	nw	kirY	v	nwu	a	0	g
17	AtkoVN	t	-	-	tu	-	-	h
18	uNN	-	-	-	-	a	-	i
19	no	n\\r	-	-	nwu	-	-	j
20	eVnY	rY	kirY	p	rYu	a	-	k
21	ceV	ww	-	.	ww	-	-	l
22	cA	-	kirY	V	-	-	0	m
23	ket	t	kirY	p	tu	-	-	n
24	ceVy	w	kirY	V	wu	-	0	o
25	UN	-	kirY	p	-	a	0	P
26	paravu	-	kirY	V	-	-	-	Q

[2] The transliteration scheme as originally used in Cruz (2002) does not follow ours. For reasons of ease it has been represented here in the WX-notation.

In evaluating a morphological paradigm for word classes in a language, established for purposes of computing, the following factors need to be reviewed:

1) The manner it conceptualizes itself morphologically
2) Whether there exist 'form' relationship between its members
3) Whether such a morphological classification has any computational gain
4) Whether such a classification is morphologically intuitive to a native speaker

Considering the morphological paradigm presented above, the implementation of GSMorph for Tamil verbs clearly violates factors 2 and 4. The classification fails to achieve a sufficient morphological 'form' relationship between its members, and this invariably would mean an unintuitive morphological paradigm for a native speaker of the language concerned. Whether such a classification has any computational gain, needs to be determined. There are more than a few instances of vacuous applications of rules, as in the case of the Past tense suffix in class 17.

To tackle the problem of the huge lexicon, and the recursive nature of auxiliary verbs, three additional blocks exclusively meant for these have been added as sub-blocks.

Chapter 8

Conclusions

8.1 Introduction

This work describes the theoretical and practical aspects of designing a morphological analyzer for the Tamil language. Focus has been on developing a morphological analyzer for Tamil that is endowed with greater coverage and efficiency. Aspects of designing a computational model for morphological analysis include:

- Deciding a model based on psycholinguistic factors.
- Designing formal methods/techniques that would enable converting theoretical descriptions into computational models.
- Actual implementation based on the above.

8.2 Modeling

Each of these three morphological analyzers discussed here is based on a distinct model of morphological analysis. The analyzer that is developed here is a blend of the IA and IP approaches to morphological decomposition. Wherever automatic phonological rules operate largely, IP is incorporated. In areas where complex but non-automatic morphophonemics (*sandhi*) is involved, IA is the choice. *AMPLE* is purely an adaptation of the concatenative mechanism of the Item and Arrangement model, whereas *Kimmo* is based on the processual approach of the Item and Process model.

8.3 Basic mechanisms

The analyzer developed here is based on the concept of a morphological paradigm. Phonological and morphophonemic rules for representative samples of stems and suffixes in each paradigm are illustrated through a series of transformational rules, governed by phonological and morphological conditioning contexts, operating upon these entries in each instance of Sandhi change. *AMPLE* does not involve the concept of a paradigm, and therefore entails a long listing of all the lexical entries that need to be called for in parsing. All allomorphic variants of roots and suffixes that are required to be parsed are entered in the root and suffix dictionaries. Decomposition of words into stems and suffixes occurs in accordance with rules that are either made permissible or constrained by a series of specified SECs, MECs and MCCs. Phonological constraints are encoded along with the relevant entries they apply on, while morphophonemic and morphotactic constraints find a place in the analysis data file. *Kimmo*, though heavily ingrained in phonological processes in a discreet way, does not seem to necessitate an extensive listing. Kimmo uses the alternation declaration in its lexicon as a means of constraining impermissible combinations of stems

and suffixes. In a fashion similar to that of AMPLE, Kimmo documents the basic inventory of the stems and suffixes, while allomorphic variants are contextually determined by two-level rules of the rule component.

8.4 Methodology

Qualitative and quantitative methods in corpus linguistics were employed to extract frequency counts and collocations of roots/stems and affixes. For every grammatical category of the language, an extracted list of the minimum number of word-forms required for a sufficient coverage had been prepared. Based on such attributes, and in consideration of the factors of coverage and efficiency for a morphological analyzer, a minimum number of morphological paradigms for each word class in Tamil had been established.

The scheme used here, for the purpose of a morphological analyzer is one based on paradigmatic features of words. What is required for a word form to be analyzed is a necessary database comprising of different tables of inflectional forms of a word, for all the words in the language. Every such table constitutes a set of roots or stems that represent the paradigmatic patterns they follow, implicit in that particular table, for the analysis of word-forms.

An analysis of two other well-established models of morphological analysis: AMPLE and KIMMO had also been taken up for the purpose of comparison. They formed good platforms for implementing morphological analyzers in various languages. Implementation of these have been compared with the Tamil analyzer developed here, taking into consideration factors such as, the cost of implementation in terms of effort and time, coverage and efficiency.

8.5 Computational Models: Implementation

Any theoretical framework cannot be directly transferred per se to fit into a computational framework. Implementing a morphological framework into a computational formalism would invariably necessitate certain technical adjustments of the framework, in order that it evolve a fine-tuned sophisticated working model. Specific theoretical models of morphology have been implemented in different computational models with a view to learn if theory and formalism do indeed go hand-in-hand, through the process of implementation to check the suitability of each for a specific language.

8.5.1 THE HYBRID MORPH FOR TAMIL

The analyzer for Tamil developed and described in this thesis, is a hybrid model that finds its theoretical basis in a blend of the LA and IP models of morphology. It constitutes an in-built lexicon and involves a decomposition of words in terms of morphemes within the model to realize surface well-formed word-forms. The functioning can be described as defining a transformation depending on the morphemic nature of the word stem. The analysis involves a scanning of the string from the right to the left periphery scanning each suffix at a time, stripping it, and reconstructing the rest of the word with the aid of P and MP rules exemplified in each instance. This goes on rill the string is exhausted. (For details of implementation see Ch.7, Sec.7.1.1, and Appendices l(a-e) for the database.)

8.5.2 THE AMPLE IMPLEMENTATION FOR TAMIL

AMPLE illustrates an Item and Arrangement model of morphology, which underlies the principle of "allomorph matching". The Tamil morphological database comprises of a comprehensive listing of all the allomorphs, for each of the word classes of the language (both roots and suffixes). Wrong combinations of stems and suffixes have been barred by specifying phonological, morphophonemic or morphological constraints wherever necessary. (For details of implementation see Ch.7, Sec.7.1.2, and Appendix 2 for the database.)

8.5.3 THE KIMMO IMPLEMENTATION FOR TAMIL

KIMMO is largely principled on the theory of *two level phonology*. A phonological rule builds up a direct correspondence between the underlying form of a word and its surface realization based on the actual environment that it occurs in. Rules relate the nature of a transformational rule based on context of occurrence, along with a specification of the frequency of application. The functioning relies on what may be termed as a *finite state automaton*, which processes an input word through a sequential scanning of the given string. (For details of implementation see Ch.7, Sec.7.1.3, and Appendix 3 for the database.)

8.6 Computational Models: Comparison of Results

Parsing a sample string[1]

A sample noun string from Tamil ***marafkaLYppaRRiyum*** 'also about the trees', will be taken up as an example to illustrate the parsing mechanism in each of the three models.

Input: ***marafkaLYppaRRiyum*** (corresponds to ***marafkalYEpparYrYiyum*** in the WX notation)
Output: ***maram*** **+** ***kaL*** **+ Y +** ***paRRi*** **+ um**
Gloss: 'tree' (noun) + (plural) + (acc.) + 'about' (accparticle) + 'also' (inclusive clitic)
Translation: 'also about the trees'

8.6.1 Parsing in the HYBRID model

In the Hybrid model, developed and implemented in PERL, the following rules have to be declared, besides the lexical search for inflections:

```
$nounword =~ s/(.*)yum/$1/;
$nounword =~ s/(.*fkalYE)pparYrYi/$1/;
$nounword =~ s/(.*fkalY)E/$1/;
$nounword =~ s/(.*f)kalY/$1/;
$nounword =~ s/(.*)f/$1m/;
```

Here, we have a right-to-left analysis of the given string. Each character at a time, from the right periphery up to the point of entry is presumed a possible morpheme. This is checked with a feasible pair (in the rule file) & simultaneously with a possible set of entries in the lexicon file. Each lexical entry is interpreted as a letter tree. The analyzer tries the possibility of moving down a letter tree. The parse progresses if the following character in the string finds a match in the letter tree. This part of the matched suffix is then stored in a

[1] Two different notations have been used in this thesis. Correspondences of these with the IPA notation have been provided in the Transliteration Table in the beginning of the thesis.

temporary array, with the corresponding tag. If a match is not found, the recognizer backtracks to try out another alternative as a possible progress down that letter tree. Global P-rules apply at large, in the reconstruction of the stem, immediately after a suffix has been stripped. Sandhi rules apply wherever necessary. The ordering of rules is such that the analysis involves a stripping of each inflectional suffix starting from the outermost level.

The parse progress of the string can be shown algorithmically as follows:

```
1.  Enter Main
2.  Let Lexioon.pl be Lexicon
3.  Let Noun.pl be subNoun
4.  Let Pronoun.pl be subPronoun
5.  Let Numeral.pl be subNumeral
6.  Let Verb.pl be subVerb
7.  Let fldjective.pl be subAdjective
8.  Prompt for <STDIN>
9.  Let <STDIN> - "marafkalYEpparYrYiyum" (input string)
10. Chop "marafkalYEpparYrYiyum"
11. Go to subNoun
12. Enter subNoun
13. Let nounword be wf
14. Let nouncaseform be ncf
15. Let nouncase be nc
16. Let nounbaseform be nbf
17. Let nounbase be nb
18. Let nounnumform be nnf
19. Let nounnum be nn
20. Print "Noun Form is wf is maraf kalYEpparYrYiyum"
21. Enter loop Clitic
22. Foreach identified clitic
23. Substitute clitic (yum) by null
24. Reconstruct wf as marafkalYEpparYrYi
25. Print "clitic is um"
26. Exit loop
27. Enter loop Particle
28. Foreach identified particle
29. Substitute particle (parYrYi) by null
30. Reconstruct wf
31. Print "particle is particleform"
32. Exit loop
33. Enter loop Case
34. Foreach identified case
35. Substitute case (E) by null
36. Reconstruct wf
37. Print "case is caseform"
38. Exit loop
39. Enter loop Base
40. Foreach identified base
41. Substitute base (0) by null
42. Reconstruct wf
43. Print "base is baseform"
44. Exit loop
45. Enter loop Number
46. Foreach identified number
47. Substitute number (kalY) by null
48. Reconstruct wf
49. Print "number is numberform"
50. Exit loop
51. Print "Noun Root is w maram"
5Z  Go to subPronoun
53. Execute loop(s)
54. If wf finds a match
55. Display result
56. Go to subNumeral
```

```
57. Execute loop(s)
58. If wf finds a match
59. Display result
60. Go to subVerb
61. Execute loop(s)
62 If wf finds a match
63. Display result
64. Go to subAdjective
65. Execute loop(s)
66. If wf find3 a match
67. Display result
68. Exit
```

The morphological string is decomposed and displayed as follows:

Noun Form:	marafkalYEpparYrYiyum
Clitic:	Inclusive1 (um)
Particle:	Accusative (parYrYi)
Base:	Accusative (E)
Number	Plural (kalY)
Oblique. Suffix:	0
Noun Root:	maram

8.6.2 Parsing in the AMPLE model

For the string to be parsed in AMPLE, the following declaration of root and suffix allomorphs, (in the specified format) are required in the AMPLE lexicon files, along with the corresponding phonological and morphophonemic constraints that apply to specific allomorphs.

Root Lexicon

```
\r      maram
\a      maram  +/~_Plr.num ((constraint on a following plural affixing suffix (MEC))
\a      maraf
\a      rnara  +/~_Plr.num ((constraint on a following plural affixing suffix (MEC))
\c      Noun/Noun
\ge     tree
```

Suffix Lexicon

```
\s      kaL
\a      kaL    /[Vlg]~_ ((constraint on a preceding long vowel (SEC))
\a      kkaL   /[Vsh]~_ ((constraint on a preceding short vowel (SEC))
\c      Noun/Noun
\ge     tree

\«      Y
\a      Y      /[Casex1]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      RY     /[Casex2]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      yY     /[Casex3]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      NY     /[Casex4]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      tY     /[Casex5]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      wwY    /[Casex6]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      LY     /[Casex7]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      MY     /[Casex8]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      lY     /[Casex9]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      vY     /[Casex10]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      mY     /[Casex11]~_((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
```

```
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Acc.cs

\s      paRRi
\a      paRRi
\a      ppaRRi
\c      Noun/Noun Pronoun/Pronoun
\ge     Pl.Acc

\s      um
\a      um      /[Casexl] ~_ ((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      yum     /[Casex2] ~_ ((constraint on a set of preceding phonemes, declared as an exclusion scl. (SEC))
\a      vum     /[Casex3] ~_ ((constraint on a set of preceding phonemes, declared as an exclusion scL (SEC))
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge     Incl.1.Cl
```

AMPLE adopts a left-to-right scan, each stem at a time scanned and checked for a possible entry in the root lexicon file. If a match for a root is found the scan proceeds to the suffix lexicon. A parse can progress, only if the string satisfies the specified SEC/MEC/MCC(s). As long as a suffix is found, the parse progresses until the string is exhausted, the suffix being stripped off at each level. The parse goes through a series of both succession and final tests, to check the validity of a parse and its ambiguity levels, before the output is declared.

The parse progress of the string is shown as follows:

```
Parsing marafkaLYppaRRiyum
root: mara tree Noun  +/ _ ~Plr.num
No more suffixes found.
root: maraf tree Noun
sfx: kaL Plr.num Noun/Noun oc = 0   / [Vlg] ~_
sfx: Y Acc.cs Noun/Noun oc = 0
sfx: ppaRRi Pl.Acc Noun/Noun oc = 0
sfx: yum Habitual.Ppl Verb/Verb oc = 0
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: yum Incll.Cl Noun/Noun oc = 0   / [Casex3] ~_
No more suffixes found.
End of word found; checking final tests
Analysis: < Noun tree > Plr.num Acc.cs Pl.Acc Incll.Cl
Decomposition: maraf-kaL-Y-ppaRRi-yum
sfx: yum Incll.Cl Pronoun/Pronoun oc = 0   / [Casex3] ~_
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: yum Incll.Cl Numeral/Numeral oc = 0   / [Casex3] ~_
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: yum Incll.Cl Adjective/Adjective oc = 0   / [Casex3] ~_
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: yum Incll.Cl Verb/Verb oc = 0   / [Casex3] ~_
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: ppaRRi Pl.Acc Pronoun/Pronoun oc = 0
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: pp Fut.tns Verb/Verb oc = 0   / [Futx2] ~_
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: p Fut.tns Verb/Verb oc = 0   / [Futx1] ~_
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: Y Acc.cs Pronoun/Pronoun oc = 0
Suffix test PROGRESSIVE_CATEGORY_ST failed.
sfx: ka Inf. Verb/Verb oc - 0
Suffix test PROGRESSIVE_CATEGORY_ST failed.
```

The morphological string is decomposed as follows:

```
\a <Noun tree> Plr.num Acc.cs Pl.Acc Incl1.Cl
\d maraf-kaL-Y-ppaRRi-yum
\w marafkaLYppaRRiyum
\n\n
```

8.6.3 Parsing in the KIMMO model

For the string to be parsed in KIMMO, the following two-level rules (in the specified format), have to be declared in the rule component of KIMMO, along with the necessary lexicons turned on.

RULE "1 Consonant defaults" **1 19**

	k	c	t	v	p	r	F	f	N	n	**m**	**M**	y	**R**	L	v	**Z**	1	@	#	Surface
	k	c	t	w	p	r	F	f	N	n	**m**	**M**	y	R	L	v	**Z**	1	@	#	Underlying
1:	1	1	1	1	**1**	1	**1**	1	1	1	1	1	1	1	1	1	**1**	1	1		

RULE "2 Vowels and other defaulits" 113

	•	A	**i**	**I**	u	***V***	**e**	E	Y	o	0	W	@	#	Surface
	a	A	i	I	u	U	**e**	E	Y	o	**0**	W	*(a*	#	Underlying
1:	**1**	**1**	**1**	**1**	1	**1**	1	**1**	1	1	1	1	1		

RULE "3 Gemination, 0:{k,l,v,t,N,p} ⇒ {Vbl,l,v,t,N,p} (+:0)___" 7 14

	Vbl	1	**v**	t	N	p	**+**	0	0	0	0	0	0	@	Surface
	Vbl	1	**v**	t	N	p	**0**	k	1	v	t	N	p	*(a*	Underlying
1:	**2**	3	**4**	5	6	7	**l**	0	0	0	0	0	0	**1**	
2:	2	3	**4**	5	6	7	2	1	0	0	0	0	0	1	
3:	0	3	4	**5**	6	7	3	0	1	0	0	0	0	1	
4:	2	0	4	5	6	7	4	0	0	1	0	0	0	**1**	
5:	2	3	0	**5**	6	7	5	0	0	0	1	0	0	**1**	
6:	2	**3**	4	0	6	7	6	0	0	0	0	1	0	1	
7:	2	3	4	5	0	7	7	0	0	0	0	0	1	1	

RULE "5 **Nasal** Assimilation, **nrf ⇒ ___(+:0)** k" 3 4

	m	+	k	*@*	Surface
	f	II	k	*(a*	Underlying
1:	2	1	1	1	
2.	**0**	3	0	0	
3.	**0**	**0**	1	0	

RULE "8 Glide Insertion, 0:{v,y} ⇒ **{Vbk,Vft}** (+:0)___V" 4 6

	Vbk	Vft	+	0	0	*@*	Surface
	Vbk	Vft	0	v	y	*@*	Underlying
1:	**2**	**3**	**1**	0	0	1	
2:	0	3	2	1	0	**1**	
3:	**0**	**0**	3	0	**1**	**1**	
4:	2	**0**	4	0	0	1	

KIMMO adopts a left-to-right parse, scanning and checking each character with a feasible pair (in the rule file) & simultaneously with a possible set of entries in the lexicon

file. Each lexical entry is interpreted as a letter tree. The analyzer tries the possibility of moving down a letter tree. The parse progresses if the following character in the string finds a match in the letter tree. If a match is not found, the recognizer backtracks to try out another alternative as a possible progress down that letter tree. Analysis involves a surface to lexical realization of a string.

The parse progress of the string is shown as follows:

```
        ENTERING LEXICON INITIAL
        ACCEPTING NULL ENTRY IN LEXICON INITIAL
        ENTERING LEXICON NOUN_ROOT
 0  m:m  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1        [
 1  a:a  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1     m    [
 2  r  :  r  l  l  l  l  l  l  l  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  m a    [
 3  a:a  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  mar    [
 4  m  :  f  l  l  l  l  l  l  l  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  mara    [
        ENTERING LEXICON NUMBER
 5  +:0  1  1  1  1  2  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram
[N(maram)
 6  k:k  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+
[N(maram)
 7  a:a  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+k
[N(maram)
 8  L:L  1  1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+ka
[N(maram)
        ENTERING LEXICON CASE
 9  +:0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+kaL
(N(maram)+PL
10 Y:Y  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+kaL+
[N(maram)+PL
        ENTERING LEXICON NOUN_INFLECTIONS
11  +:0  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+kaL+Y
[N(maram)+PL+ACC
12  p:p  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1   maram+kaL+Y+
[N(maram)+PL+ACC
13   0:p   1  1  7  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p     [N(maram)+PL+ACC
14   a:a   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0    [N(maram)+PL+ACC
15   R:R   1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0a     [N(maram)+PL+ACC
16   R:R   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aR    [N(maram)+PL+ACC
17   i:i   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRR    [N(maram)+PL+ACC
        ENTERING LEXICON NOUNINFLECTIONS
18   +:0   1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRRi    [N(maram)+PL+ACC+Pl.Acc
19   0:y   1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRRi+    [N(maram)+PL+ACC+Pl.Acc
20   u:u   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRRi+0    [N(maram)+PL+ACC+Pl.Acc
21-      BLOCKED IN LEXICON NOUN_INFLECTIONS: INPUT -     m
20<           1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRRi+0    [N(maram)+PL+ACC+Pl.Acc
20-      BLOCKED IN LEXICON NOUNINFLECTIONS: INPUT =     um
19<           1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRRi+    [N(maram)+PL+ACC+Pl.Acc
19-      BLOCKED IN LEXICON NOUN_INFLECTIONS: INPUT -     yum
18<           1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+pOaRRi    [N(maram)+PL+ACC+Pl.Acc
18   0:y   1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+pOaRRi    [N(maram)+PL+ACC+Pl.Acc
19   +:0   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRRi0    [N(maram)+PL+ACC+Pl.Acc
```

```
2 0    u:u    1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi0+     [N(maram)+PL+ACC+Pl.Acc
21-       BLOCKED IN LEXICON NOUNINFLECTIONS: INPUT =     m
20<          l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi0+     [N(maram)+PL+ACC+Pl.Acc
20-       BLOCKED IN LEXICON NOUN_INFLECTIONS: INPUT -     um
19<          l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+pOaRRiO      [N(maram)+PL+ACC+Pl.Acc
19-       BLOCKED IN LEXICON NOUN_INFLECTIONS: INPUT -     um
18<          1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi     [N(maram)+PL+ACC+Pl.Acc
         BACKING UP FROM LEXICON NOUN_INFLECTIONS TO LEXICON NOUN_INFLECTIONS
         ENTERING LEXICON VERB_INFLECTIONS
18    +:0    1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+pOaRRi      [N(maram)+PL+ACC+Pl.Acc
19    0:y    1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi+     [N(maram)+PL+ACC+Pl.Acc
20-       BLOCKED IN LEXICON VERB_INFLECTIONS: INPUT =     um
19<          1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi+     [N(maram)+PL+ACC+Pl.Acc
19-       BLOCKED IN LEXICON VERB_INFLECTIONS: INPUT =     yum
18<          1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi     [N(maram)+PL+ACC+Pl.Acc
18    0:y    1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi     [N(maram)+PL+ACC+Pl.Acc
19    +:0    1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 i i i
maram+kaL+Y+p0aRRi0     [N(maram)+PL+ACC+Pl.Acc
20-       BLOCKED IN LEXICON VERB_INFLECTIONS: INPUT =     um
19<          l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi0     [N(maram)+PL+ACC+Pl.Acc
19-       BLOCKED IN LEXICON VERB_INFLECTIONS: INPUT =     um
18<          1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi     [N(maram)+PL+ACC+Pl.Acc
         BACKING UP FROM LEXICON VERBINFLECTIONS TO LEXICON NOUN_INFLECTIONS
         ENTERING LEXICON COMMON_INFLECTIONS
18    +:0    1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+pOaRRi  [N(maram)+PL+ACC+Pl.Acc
19    0:y    1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi+     [N(maram)+PL+ACC+Pl.Acc
20    u:u    l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi+0     [N(maram)+PL+ACC+Pl.Acc
21    m:m    1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi+0u     [N(maram)+PL+ACC+Pl.Acc
         ENTERING LEXICON COMMONINFLECTIONS
22    +:0    l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi+0um     [N(maram)+PL+ACC+Pl.Acc+ Incl1.Cl
23-       BLOCKED IN LEXICON COMMON_INFLECTIONS: INPUT =
22<          l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi+0um     [N(maram)+PL+ACC+Pl.Acc+ Inell.Cl
         BACKING UP FROM LEXICON COMMONINFLECTIONS TO LEXICON COMMON_INFLECTIONS
         ENTERING LEXICON End
         ACCEPTING NULL ENTRY IN LEXICON End

  RESULT = maram+kaL+Y+p0aRRi+0um [N(maram)+PL+ACC+PlAcc+ Incl1.Cl]

22<          l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi+0um     [N(maram)+PL+ACC+Pl.Acc+ Inell.Cl
         BACKING UP FROM LEXICON End TO LEXICON COMMONINFLECTIONS
21<          1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi+0u     [N(maram)+PL+ACC+Pl.Acc
20<          l l l l l l l l l l l l l l l l l l l i i i
maram+kaL+Y+p0aRRi+0     [N(maram)+PL+ACC+Pl.Acc
19<          1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+p0aRRi+     [N(maram)+PL+ACC+Pl.Acc
18<          1 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
maram+kaL+Y+pOaRRi     [N(maram)+PL+ACC+Pl.Acc
         BACKING UP FROM LEXICON COMMONINFLECTIONS TO LEXICON NOUN_INFLECTIONS
```

```
17<          1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0aRR    [N(maram)+PL+ACC
16<          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l
maram+kaL+Y+p0aR     [N(maram)+PL+ACC
15<          1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p0a      [N(maram)+PL+ACC
14<          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l
maram+kaL+Y+p0     [N(maram)+PL+ACC
13<          1  1  7  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
maram+kaL+Y+p      [N(maram)+PL+ACC
12<          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l      maram+kaL+Y+
[N(maram)+PL+ACC
11<          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l      maram+kaL+Y
[N(maram)+PL+ACC
          BACKING UP FROM LEXICON NOUNINFLECTIONS TO LEXICON CASE
10<          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l      maram+kaL+
[N(maram)+PL
 9 <          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l      maram+kaL
[N(maram)+PL
          BACKING UP FROM LEXICON CASE TO LEXICON NUMBER
 8 <          1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1      maram+ka
[N(maram)
 7 <        l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l    maram+k
[N(maram)
 6 <        1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1    maram+
[N(maram)
 5 <        1  1  1  1  2  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1    maram
[N(maram)
          BACKING UP FROM LEXICON NUMBER TO LEXICON NOUNROOT
 4 <          1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1      mara     [
 3 <          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l      mar      [
 2 <        1  1  1  1  1  1  1  1  3  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1      m a      [
 1 <          l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l      m      [
 0 <        l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l            [
          BACKING UP FROM LEXICON NOUNROOT TO LEXICON INITIAL
 0<           l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l  l
 0          maram          +kaL     +Y          +paRRi          +um             0
 [          N(maram)       +PL      +ACC        +Pl.Acc         +Incll.Cl       ]
          INITIAL NOUN_ROOT NUMBER CASE NOUN_INFLECTIONS COMMON_INFLECTIONS End
```

The morphological string is decomposed as follows:

maram+kaL+Y+paRRi+um
[N(maram)+PL+ACC+Pl.Acc+ Incl1.Cl]

8.7 Observations

Based on how a given morphological string is analyzed by the three different models, the three implementations of morphological analysis would be **benchmarked,** considering factors such as the cost of implementation, advances in coverage, and efficiency. The foUowing are the features of comparison as shown in Table 8.1:

Sl.No.	Feature for Computation	Label
1	Theory	A
2	Number of Components	B
3	Number of Rules	C
4	Number of Allomorphs	D
5	Number of Constraints	E
6	Number of Backtrackings/Blockings	F
7	Ambiguity Level(s)/Failure(s)	G
8	Parsing Time	H

TAMIL MORPH	A	B	C	D	E	F	G	H
implemented in AMPLE	IA/Pattern matching (ConcatenanVe)	6	0	16	17	17	0	3.2s
implemented in KIMMO	Two-level phonology (Processual)	7	3	5	7	7	0	3.8s
The Hybrid model	1A/IP (P/MP rules)	6	3	6	0	0	0	2.9s

Table 8.1: Benchmarking the Analyzers

8.8 Discussion

The above presentation calls for a discussion on three aspects of parsing:

1) How a particular string is analyzed by the three models; (Example from a noun in Tamil)
2) The limitations and merits of each model;
3) Problems posed during the parse progress.

Discussions on these issues follow.

PROBLEMS

I. The AMPLE Analyzer

The problems in the case of AMPLE are twofold:

i) AMPLE involves a huge set of allomorphs for each root and suffix entry in the lexicons.
ii) In addition, there are very many constraints in the case of each allomorph, necessary to constrain impermissible combinations, hence cost on analyst's effort and process time.

II. The KIMMO Analyzer

The problems faced in this implementation and testing of KIMMO are threefold:

i) KJMMO requires several lexicons to parse a single string.
ii) KIMMO requires fine-grained alternation declarations to parse a single string.

There have been various other kinds of problems reported handling Kimmo for a language like Tamil. Limitations of Kimmo in tackling morphologically complex languages have already been stated: "Only restricted infixation and reduplication can be handled

adequately with the present system. Some extensions or revisions will be necessary for an adequate description of languages possessing extensive infixation or reduplication." (Koskenniemi 1983: 27, as quoted in Beesley & Karttunen 2000)

Sarkar, basically addresses the problem of descriptive inadequacy, faced in the adaptation of Kimmo's two-level morphology to Indian languages, particularly Tamil. An extension of this formalism through an allowance of co-existing conflicting phonological rules, without disturbing the working or complexity of the fundamental model, is seen as a solution to this problem

In "Two Level Morphology with Composition" of Karttunen, Kaplan et. al), find that a processual mechanism as that of Kimmo tends to fail. The reasons he attributes to this are:

a) Lexical representations tend to be arbitrary.

Encoding forms for a morphologically complex language necessitate the use of symbols and/or diacritics. Writing and testing a two-level system in such a case tends to be logically tedious and morphologically cumbersome, in the sense that 'radically dissimilar' links between the surface and lexical forms do not satisfy the condition of being phonologically intuitive.

b) Morphological categories are not directly encoded as part of the lexical form.

Due to a representation of string structures in non-grammatical terms, a morphological understanding of string processes is not enabled.

Finite-state morphology rests on the observation that ordinary morphological alternations involve regular relations. When the relationship between lexical and surface forms is complex, the descriptive task of setting up rules that relate the two levels can be simplified by decomposing the complex relation to a series of less opaque matches. For efficient recognition and generation, the resulting cascade can be reduced to a single transducer. This is the basis of the early work by Kaplan and Kay (2000) on converting ordered rewrite rules to a cascade of transducers and the parallel transducers of Koskenniemi's two-level model.

On the psychological standpoint of two-level morphology, Karttunen, Kaplan et. al., have the following to say: "The fact that it is possible to construct a lexical transducer for the whole language raises interesting theoretical issues. In linguistics it is commonly assumed that lexical entries and the rules for realizing them exist independently from one another. The initial separation between the lexicon and the rules is useful in constructing a system for word recognition and generation. The rules are, in a sense, a decomposition of a very complex mapping between lexical and surface forms to a set of simpler relations that we can comprehend and manipulate. But in the construction of the final result individual rules and the distinct lexicon disappear. The rules play no role at all in the actual generation and recognition process. They are needed only for the purpose of enlarging the lexicon, although other acquisition methods can be envisioned. The rules are true generalizations about the two-level lexicon constructed with them but they are not a part of it. In linguistics the psychological reality of rules is often taken to be established by the observation that a simple listing of all forms would be not only implausible but even impossible, given that the brain must have some storage limitations. The general organization of the system like the one we have described suggests that the role of rules might be quite different. Instead of being essential for the production and comprehension of speech, the rules that linguists are trying to discover may be - if they exist in the mind at all - only secondary reflections on the generalizations that can be encoded in the finite-state lexical structure itself."

III. The Hybrid Analyzer

The main problem in the implementation of the Hybrid model is that:

i) It involves a specific ordering of rules for the analysis to be performed correctly, and for the inflections to be stripped systematically. This however can be taken care of, through a finer specification of phonotactics/morphotactics for each inflection.

COVERAGE

A set of 23 classes of nouns formed the input to the parsers. AMPLE does not have the feature of paradigmatic functioning ingrained. It therefore fails to account for a nominal form, not listed in the lexicon. Although KIMMO functions on generic rules, it too does fail to parse the input that is not listed in its lexicon. The Hybrid model for Tamil accounts for any noun that falls within any one of the 23 specified classes in the nominal paradigm.

ECONOMY

KIMMO involves numerous steps in analysis compared to AMPLE and the Hybrid model. Backtracking proves costly.

8.9 Some Theoretical Issues

I wish to draw attention to Maxwell's claim on the possibility of a direct mapping of an Item and Arrangement (IA) model into an Item and Process (IP) description in the context of computational implementations of morphological models.

Theoretically, IA and IP have been distinguished in varying ways, specifically in their concept and treatment of morphemes and allomorphs. Structurally, IA is one, which regards both roots and affixes as morphemes, and IP, that considers roots as morphemes and affixes as rules. Functionally, IA involves a concatenative approach to word formation. Words are composed of stems and affixes, in agreement with specific combinatorial rules of grammar. IP rather adopts a processual mechanism in word formation. Every morpheme has one basic underlying allomorph from which all other allomorphic forms find their origin through transformational rules of phonology.

Descriptively, and in a formalistic framework, in accordance with Bybee 1985 and Pike & Pike 1982, the bifurcation is reframed as one between the *Multiple Underlying Form* model (**MUF**) and the *Single Underlying Form* model (SUF). MUF models that assume a complete listing of all allomorphs of all morphemes to be listed in the lexicon of the language roughly correspond to the IA theory. SUF models that presuppose a single underlying basic allomorph in the lexicon, from which all other allomorphs of the relevant morpheme are derived through phonological rules of the language, corroborate with the IP theory of morphology.

Maxwell is of the view that although IP is ideal in its theoretical basis, it is essential that IA be given more allowance at the descriptive level in practice.

A MUF model assigns a fundamental status to allomorphs, all of which are stored in the lexicon, and a specific one of them is chosen for lexical insertion based on the relevant phonological or morphosyntactic context. In a SUF model however, only one basic underlying allomorph is stored in the lexicon, the others being derived from this through the application of P-rules.

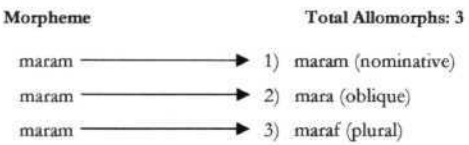
To trace the link between the 2 theories, I quote from Maxwell (1998: 3):

"…. SUF theories in fact provide an "escape" mechanism, which allows the translation of an MUF description into an SUF description in a way, which is both mechanical and transparent to the user. The implication is that while an underlying parsing engine may implement SUF morphology internally, it can in fact process descriptions couched in terms of either SUF or MUF morphology, with a minor amount of preprocessing."

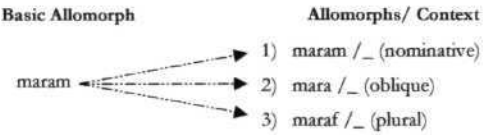
The necessity of the IA scheme is seen in instances where phonologically conditioned allomorphy is sometimes unaccountable through derivation. Moreover a simplified statement of allomorphy through the long listing technique as in the MUF model, would serve for a more concrete understanding of the nature of allomorphy rules. The IP model envelops in its allomorphy rules, principles of the IA model. As a matter of fact, any lexical item, with multiple allomorphs can be mechanically transformed into a lexical item with a single underlying basic allomorph, together with one or more allomorphy rules to derive the rest. To illustrate this line of reasoning:

The lexical entry *maram* 'tree', as represented in the IA & IP model, is as follows:

Item & Arrangement:



Item & Process:



Translating an IA description into an IP one, rather more precisely, an MUF to an SUF model would involve a diacritical marking of the allomorph that is chosen as the prime underlying one. The remaining allomorphs could be realized in their specific environments through rules, 'sensitive' to the diacritic feature. Allomorphy statements can, at any stage be collapsed into allomorphy rules.

Benefits of a system that describes one theory in terms of another, as Maxwell states, "is re-use of the parsing engine, at the cost of building a user interface to translate theories."

The Hybrid Model considers a word as a morpheme. As to the treatment of allomorphy, the Hybrid Model is an amalgam of the MUF and SUF approaches to morphological decomposition. Allomorphs are predominantly used, but principles of the IP are at work, whenever the alternations are declared. Morpheme-specific phonological and morphological constraints are incorporated in the loop on the lines of a MUF model. The functioning of the Hybrid Model can be said to be grounded in a linguistic approach to morphology, rather than a pure computational approach.

AMPLE considers a word as a string-sequence. Natural classes of sounds are described in terms of string 'classes'. As to the treatment of allomorphy, AMPLE represents a MUF approach to word processing. The contextual restrictions on the occurrence of particular allomorphs are imposed by 'Morpheme Co-occurrence Constraints' (MCCs), 'Morpheme Environment Constraints' (MECs) and 'String Environment Constraints (SECs), which fairly correspond to the theoretical concepts of 'morphotactic', 'morphophonemic' and 'phonological' factors of contextual conditioning. In addition to such constraints, AMPLE also has features such as the 'morpheme property' and 'allomorph property', which are assigned to individual morphemes and allomorphs respectively. Attributes like morpheme property or constraints, have to be externally devised, since AMPLE does not have these features ingrained. AMPLE can therefore be observed as one with a straight computational bent in its approach to morphology, rather than a linguistic one.

KIMMO too, considers a word as a string-sequence. In the treatment of allomorphy however, KIMMO adopts a SUF approach to word processing. There is no allomorphy involved. The concept of contextual restrictions is entirely phonological. Morphophonemic or Phonological change on the one basic lexical entry is handled by the specification of a two-level rule. KIMMO's approach to parsing a word can be viewed as one with a phonological approach to morphology', rather than a strictly morphological one.

Bibliography

Aduriz I. _; Agirre E.; Aldezabal I.; Alegria I.; Arregi X.; Arriola J. M.; Artola X; Gojenola K.; Maritxalar A.; Sarasola K.; and Urkia M. _ 2000. A word-grammar based morphological analyzer for agglutinative languages. Basque Country: University of the Basque Country. http://nlp3.korea.ac.kr/proceeding/coling2000/COLING/pdf/001.pdf

Agesthialingom, S. 1967. Generative Grammar of Tamil. Annamalainagar: Annamalai University.

Agesthialingom, S; and Varma G. Srinivasa (eds.) 1980. Auxiliaries in Dravidian. Annamalainagar: Annamalai University.

Aiyar, Swaminatha R. 1987. Dravidian Theories. Madras: Motilal Banarsidas.

Albert, D. 1985. Tolkaappiyam. Phonology and Morphology (An English Translation). Madras: International Institute of Tamil Studies.

Aldezabal. I; Aranzabe. M; Atutxa. A; Gojenola. K; Oronoz. M; and Sarasolak. Application Of Finite-State Transducers to The Acquisition Of Verb Subcategorization Information http://ixa.si.ehu.es/Ixa/Argitalpenak

Alegria I.; Artola X.; Sarasola K.; and Urkia M (1996) *Automatic morphological analysis of Basque:* Literary and Linguistic Computing, 11 (4): 193-203. Oxford University.

Ambedkar, Ganesan. 1998. Strategies in the Formation of Word-Level Equivalence with Special Reference to Tamil Words. Unpublished Ph.D Thesis. Hyderabad: University of Hyderabad.

Andronov, M. S. 1977. Dravidian Languages. Vijayawada: VisalAndhra.

Annamalai, E., and Steever, B. Sanford, 1998. Modem Tamil, In Steever, B. Sanford, (ed.) The Dravidian Languages. London: Routledge.

Antworth, L Evan. 1990. PC-KIMMO: A Two Level Processor for Morphological Analysis. Dallas: Summer Institute of Linguistics.

Arden, A. H. 1976. A Progressive Grammar of the Tamil Language. Madras: The Christian Language Society.

Aronoff, Mark. 1985. Word Formation in Generative Grammar. Massachusetts: Massachusetts Institute of Technology.

Arulmozhi. 1998. Aspects of Inflectional Morphophonology — A Computational Approach. Unpublished Ph.D Thesis. Hyderabad: University of Hyderabad.

Asher. 1985. Tamil. London: Croom Helm.

Ayyar, C P. Venkatarama; Subbayya, K.V.; and Pillai, S. Anavaratarinayakam. 1987. Dravidic Studies. Madras: Sri Satguru.

Bharari Akshar, Chaitanya, Vineet.; and Sangal, Rajeev. 1995. Natural Language Processing. A Paninian Perspective. New Delhi: Prentice Hall of India.

Bharati Akshar; Chaitanya, Vineet; Kulkarni. P.Amba; and Sangal, Rajeev. 1997. Anusaraka: Machine Translation in Stages. Mumbai: Vivek, A Quarterly in Artificial Intelligence, Vol.10, No.3 (pp.22-25), NCST.

Bharati Akshar, Bhatia, Medhavi; Chaitanya, Vineet; and Sangal, Rajeev. 1997. Paninian Grammar Framework Applied to English. New Delhi: South Asian Language Review.

Black, H. Andrew and Black, A. Cheryl. 1999. A Conceptual Introduction to Morphological Parsing using AMPLE. Dallas: Summer Institute of Linguistics.

Carstairs-McCarthy, Andrew. 1998. Paradigmatic Structure: Inflectional Paradigms and Morphological Qasses, In Spencer, Andrew and Zwicky, Arnold (eds.) *The Handbook of Morphology.* Oxford: Blackwell.

Cruz. 2002 Parsing and Generation of Tamil Verbs in GSMorph. Unpublished M.Phil Dissertation. Hyderabad: University of Hyderabad.

Garman, Michael. 1990. Psycholinguisrics. Great Britain: Cambridge University Press.

Harel, David. 1987. Algorithmics: The Spirit of Computing. Great Britain: Wesley Publishers.

Hiroshi. Sano; Ryoichi, Kawada; and Minako, Hasimoto. Morphological Grammar Rules: an implementation for JUMAN. Japan: Toshiba Kansai Research Laboratory. hrrp: //citeseer.nj.nec.com/hiroshi94morphological.html

Hooper, B. Joan. 1976. An Introduction to Natural Generative Phonology. New York: Academic press.

Innaasi, S. 1985. Colliyal. Madras. Abhirami Publications.

Karttunen. Lauri; Kaplan. M. Ronald; and Zaenen. Annie. 1992. Two-Level Morphology with Composition. Xerox Palo Alto Research Center. Stanford University. http://www.ling.gu.se/~lager/kurser/FST/papers/coling92.ps

Katamba, Francis. 1994. Morphology. London: Macmillan.

Kenneth. R. Bessley and Karttunnen, Lauri 2000. Finite-State Non-Concatenative Morphotactics. Proceedings of the Fifth Workshop of the ACL Special Interest Group in Computational Phonology. p. 1-12. Luxembourg.

Kiparsky, Paul. 1982. Explanation in Phonology. (Publication in Language Sciences). Dodrecht — Holland: Foris.

Kulkarni, Charulatha. 1997. Preparations for Morphological Analyser for Marathi. Unpublished M.Phil Dissertation. Hyderabad: University of Hyderabad.

Leavitt, R.R.John. MORPHE: A Practical Compiler for Reversible Morphology Rules. Pittsburgh. Carnegie Mellon University. http://acl.ldc.upenn.edu/A/A92/A921034.pdf

Lehmann, Thomas. 1989. A Grammar of Modem Tamil. Pondicherry: Pondicherry Institute of Linguistics and Culture.

Lemay, Laura. 1999. SAMS Teach yourself Perl in 21 days. (Indian edn.). New Delhi: Techmedia.

Matthews, P. H. 1972. Inflectional Morphology. London: Cambridge University Press.

_____ 1974. Morphology. Introduction to the Theory of Word Structure. Cambridge: Cambridge University Press.

McCarthy, James. 1998. Morpheme Structure Constraints and Paradigm Occultation. Amherst: University of Massachusetts.

McConnel, Stephen and Black, H. Andrew. 2002 AMPLE Reference Manual: A Morphological Parser for Linguistic Exploration; version 3.5. Dallas: Summer Institute of Linguistics.

Oflazer, Kemal 1999. Dependency Parsing with an Extended Finite State Approach. Computing Research Laboratory. New Mexico: New Mexico State University. ftp://ftp.lcsl.metu.edu.tr/pub/papers/cmlr.ps.gz

Pope, G. U. 1985. A First Catechism of Tamil Grammar. Madras: The South India Saiva Siddhantha Works Publishing Society.

Ramaswamy, Vaishnavi. 2000. A Morphological Generator for Tamil. Unpublished M.Phil Dissertation. Hyderabad: University of Hyderabad.

Ramesh, G. V. 1997. Improvement of Telugu Morphological Analyzer for Anusaaraka (Machine Translation) Applications. A study of Adjectives. Unpublished M.Phil Dissertation. Hyderabad: University of Hyderabad.

Rangaswamy, R. 1995. Comparative Dravidian. Coimbatore: Bharathiar University.

Ritchie, D. Graeme; Russell, J. Graham; Black, W. Alan; and Pulman, G. Stephen. 1992 Computational Morphology. Practical Mechanisms for the English Lexicon. Massachusetts: Massachusetts Institute of Technology.

Sarkar, Anoop. 1993. Extending Kimmo's Two-Level Model of Morphology. CDAC. Pune: Pune University. http://www.sfu.ca/~anoop/papers/pdf/kimmo.pdf

Scalise, Sergio. 1984. Generative Morphology. Holland: Forris.

Shanmugam, S. V. 1967. Naccinarkkiniyar's Conception of Phonology. Annamalainagar: Anna University.

_____1978. Theory of Morphology in Tolka:ppiyam, in Agesthialingom, S., Raja.N.Kumaraswami (eds.) Studies in Early Dravidian Grammars. Annamalainagar. Annamalai University.

Singh, Rajendra and Agnihotri, Ramakant. 1997. Hindi Morphology. A Word-Based Description. New Delhi: Motilal Banarsidas.

Spencer, Andrew. 1991. Morphological Theory. An Introduction to word structure in Generative Grammar. Oxford. Basil Blackwell.

Spencer, Andrew and Zwicky, Arnold (eds.) 1998. Handbook of Morphology. Oxford: Blackwell.

Sproat, Richard William. 1992 Morphology and Computation. Massachusetts: Massachussetts Institute of Technology.

Uma Maheshwara Rao, G. 1999. Morphological Analyser for Telugu (electronic form). Hyderabad: University of Hyderabad.

_____ 2000. Morphological Complexity in Telugu (Mimeo) Hyderabad: University of Hyderabad.

_____2002. A Computational Grammar of Telugu (Vol.1: Morphology) (Mimeo) Hyderabad: University of Hyderabad.

_____2002. Compound Verb Construction in Telugu. In Swarajyalakshmi (ed.) Case for Language Structures, Papers in Honour of Prof. B. LaxmiBai, 157-178. CAS in Linguistics, Osmania University: Hyderabad.

Vasanthakumari, T. 1989. Generative Phonology of Tamil. New Delhi: Mittal.

Weber, J. David, Black; H. Andrew; and McConnel, R. Stephen. 1998. AMPLE. A Tool for Exploring Morphology. Dallas: Summer Institute of Linguistics.

Maxwell, Mike. 1998. Two Theories of Morphology, One Implementation. Dallas: Summer Institute of Linguistics. http://www.sil.org/silewp/1998/001/SILEWP1998-001.html

McConnel, Stephen and Black, H. Andrew. 2002. AMPLE Reference Manual: A Morphological Parser for Linguistic Exploration; version 3.5. Dallas: Summer Institute of Linguistics.

Abbreviations

1pl	1st. person Plural (Feminine/Masculine)
1s	1*. person Singular (Feminine/Masculine)
2p/h	2nd. person –Plural/Honorific (Feminine/Masculine)
2s	2nd. person Singular (Feminine/Masculine)
2sh.br	2nd. person Singular, Honorific, Brahminical (Feminine/Masculine)
2shl/p	2nd. person Singular, Honorific, Literary/Plural (Feminine/Masculine)
3p/h	3rd. person - Plural/Honorific (Feminine/Masculine)
3sf	3rd. person Singular Feminine
3sh	3rd. person Singular Honorific (Feminine/Masculine)
3sm	3rd. person Singular Masculine
3an	3rd. person Singular Neuter
abl	Ablative
acc	Accusative
adm	Admonitive
adv	Adverbial
aux	Auxiliary Verb
bd	Bound/Indirect
ben	Benefactive
cl.emphl	Emphatic Clitic1
cl.emph2	Emphatic Clitic2
cl.incl1	Inclusive Cliticl
cl.incl2	Inclusive Clitic2
cl.intr1	Interrogative Cliticl
cl.intr2	Interrogative Clitic2
cl.min	Minimality Clitic
d.rest	Restrictive Clitic
dat	Dative
fin	Finite
fr	Free/Direct
fut	Future
gen	Genitive
gnpbase	Base for Gender, Number and Person
hab	Habitual
inf	Infinitive
ins	Instrumental
loc	Locative
negadjppl	Negative Adjectival Participle
negcdl	Negative Conditional
negfut	Negative Future
negpst	Negative Past
negvbppl	Negative Verbal Participle
nom N	omina tive
npstdurcdl	Non-Past Duratsve Conditional
obl	Oblique
pl	Particle
pl1	Particle1
pl2	Particle2
plur	Plural
poscdl	Positive Conditional
posvbppl	Positive Verbal Participle
pp	Postposition
pr	Present
pradjppl	Present Adjectival Participle
proh	Prohibitive
pst	Past
pstadjppl	Past Adjectival Participle
pstdurcdl	Past Durative Conditional
rt	Root
soc	Sociative
voc.f	Feminine Vocative
voc.m	Masculine Vocative
voc.mh	Masculine, Honorific Vocative

Appendix I — a
Algorithm for the Noun Analyzer in the Hybrid Model

```
Enter subroutine Noun()
        Let nounword=word;
        Let nomcase=" ";
        Let cliticform=" ";
        Let clitic=" ";
        Let nomnum=" ";
        Let nomcaseform=" ";
        Let nombase=" ";

print "Noun Form:      $word\n\n";

Enter loop Clitic
Set i=0
Set length = length of clitic
Set word = length of word form
Set temp = word + length
if(i<=Clitic)
        && temp = $Clitic[$i])
then substitute clitic by null
reconstruct word
Set clitic=$Clitic[$i];
print "Clitic:     $cliticform($clitic)\n";
i++
Exit loop Clitic

Enter loop Dative.Adverbial
Set i=0
Set length = length of dat.adv
Set word = length of word form
Set temp = word + length
if(i<=Dat.Adv)
        && temp = $Dat.Adv[$i])
then substitute dat.adv by null
reconstruct word
Set dat.adv=$Dat.Adv[$i];
print "Dat.Adv: $dat.advform($dat.adv)\n";
i++
Exit loop Dative.Adverbial

Enter loop Dative.Postposition
Set i=0
Set length = length of dat.postppn
Set word = length of word form
Set temp = word + length
if(i<=Dat.Postpn)
        && temp = $Dat.Postpn[$i])
then substitute dat.postppn by null
reconstruct word
Set dat.postppn=$Dat.Postpn|$i];
print "Dat.Postpn:     $dat.postppnform($dat.postppn)\n";
i++
Exit loop Dative.Postposition
```

```
Enter loop Accusative.Adverbial
Set i=0
Set length = length of acc.adv
Set word = length of word form
Set temp = word + length
if(i<=Acc.adv)
        && temp = $Acc.adv[$i])
then substitute accadv by null
reconstruct word
Set acc.adv=$Acc.adv[$i];
print "Acc.adv:   $accadvform($acc.adv)\n";
i++
Exit loop Accusative.Adverbial

Enter loop AccusanveParticle
Set i=0
Set length = length of acc.pl
Set word = length of word form
Set temp = word + length
if(i<=Acc.pI)
        && temp = $Acc.pl[$i])
then substitute acc.pl by null
reconstruct word
Set acc.pl=$Acc.pl[$i];
print "Acc.pl:    $acc.plform($acc.pl)\n";
i++
Exit loop Accusative.Particle

Enter loop Accusative.Postposition
Set i=0
Set length = length of acc.postppn
Set word = length of word form
Set temp = word + length
if(i<=Acc.postppn)
        && temp = $Acc.postppn[$i])
then substitute accpostppn by null
reconstruct word
Set acc.postppn=$Acc.postppn[$i];
print "Accpostppn:       $acc.postppnform($acc.postppn)\n";
i++
Exit loop Accusanve.Postposition

Enter loop Nominative.Postposition
Set i=0
Set length = length of Nom.postppn
Set word = length of word form
Set temp = word + length
if(i<=Nom.postppn)
        && temp = $Nom.postppn[$i])
then substitute Nom.postppn by null
reconstruct word
Set Nom.postppn=$Nom.postppn[$i];
print "Nom.postppn:      $Nom.postppnform($Nom.postppn)\n";
i++
Exit loop Nominative. Postposition
```

```
Enter loop Nominative.Adverbial
Set i=0
Set length = length of Nom.adv
Set word = length of word form
Set temp = word + length
if(i<=Nom.adv)
        && temp = $Nom.adv[$i])
then substitute Nom.adv by null
reconstruct word
Set Nom.adv=$Nom.adv[$i];
print "Nom.adv: $Nom.advform($Nom.adv)\n";
i++
Exit loop Nominative.Adverbial

Enter loop Genitive.Particle
Set i=0
Set length = length of Gen.pl
Set word = length of word form
Set temp = word + length
if(i<=Gen.pl)
        && temp = $Gen.pl[$i])
then substitute Gen.pl by null
reconstruct word
Set Gen.pl=SGen.pl[$i];
print "Gen.pl:    $Gen.plform($Gen.pl)\n";
i++
Exit loop Genitive.Particle

Enter loop Nominative.Particle
Set i=0
Set length = length of Nom.pl
Set word = length of word form
Set temp = word + length
if(i<=Nom.pl)
        && temp = $Nom.pl[$i])
then substitute Nom.pl by null
reconstruct word
Set Nom.pl=$Nom.pl[$i];
print "Nom.pl:  $Nom.plform($Nom.pl)\n";
i++
Exit loop Nominative.Particle

Enter loop Genitive Case1
if $word = "utEya"
nomcase= "Genitive Case1"
nomcaseform="utEya"
then substitute "utEya" by null
reconstruct word
print "\t\tCase            : nomcase\ (nomcaseform)\n"
Exit loop Genitive Case1
```

```
Enter loop Genitive Case2
if Sword = "inY"
nomcase= "Genitive Case2"
nomcaseform="inY"
then substitute "inY" by null
reconstruct word
print "\t\fCase          : nomcase\ (nomcaseform)\n"
Exit loop Genitive Case2

Enter loop Genitive Case3
if $word = "awu"
nomcase= "Genitive Case3"
nomcaseform="awu"
then substitute "awu" by null
reconstruct word
print "\t\tCase          : nomcase\ (nomcaseform)\n"
Exit loop Genitive Case3

Enter loop Benefactive Case1
if Sword = "ukkAka"
nomcase= "Benefactive Case1"
nomcaseform="ukkAka"
then substitute "ukkAka" by null
reconstruct word
print "\t\tCase          : nomcase\ (nomcaseform)\n"
Exit loop Benefactive Case1

Enter loop Benefactive Case2
if Sword = "lrYkAka"
nomcase= "Benefactive Case2"
nomcaseform="irYkAka"
then substitute "lrYkAka" by null
reconstruct word
print "\t\tCase          : nomcase\ (nomcaseform)\n"
Exit loop Benefactive Case2

Enter loop Dative Casel
if Sword ="ukku"
nomcase= "Dative Casel"
nomcaseform="ukku"
then substitute "ukku" by null
reconstruct word
print "\t\rCase          : nomcase\ (nomcaseform)\n"
Exit loop Dative Casel

Enter loop Dative Case2
if Sword = "irYku"
nomcase= "Dative Case2"
nomcaseform="irYku"
then substitute "irYku" by null
reconstruct word
print "\t\tCase          : nomcase\ (nomcaseform)\n"
Exit loop Dative Case2
```

```
Enter loop Sociative Case1
if Sword = "otu"
nomcase= "Sociative Case1"
nomcaseform="otu"
then substitute "otu" by null
reconstruct word
print "\t\fCase              : nomcase\ (nomcaseform)\n"
Exit loop Sociative Case1

Enter loop Sociative Case2
if $word = "utanY"
nomcase= "Sociative Case2"
nomcaseform="utanY"
then substitute "utanY" by null
reconstruct word
print "\t\tCase              : nomcase\ (nomcaseform)\n"
Exit loop Sociative Case2

Enter loop Instrumental Case
if Sword = "Al"
nomcase= "Instrumental Case"
nomcaseform="Al"
then substitute "Al" by null
reconstruct word
print "\t\rCase              : nomcase\ (nomcaseform)\n"
Exit loop Instrumental Case

Enter loop Ablative Case1
if $word = "ilirunwu"
nomcase= "Ablative Case1"
nomcaseform="ilirunwu"
then substitute "ilirunwu" by null
reconstruct word
print "\t\tCase              : nomcase\ (nomcaseform)\n"
Exit loop Ablative Case1

Enter loop Ablative Case2
if Sword = "itamirunwu"
nomcase= "Ablative Case2"
nomcaseform="itamirunwu"
then substitute "itamirunwu" by null
reconstruct word
print "\t\fCase              : nomcase\ (nomcaseform)\n"
Exit loop Ablative Case2

Enter loop Locative Case1
if Sword = "il"
nomcase= "Locative Case1"
nomcaseform="il"
then substitute "il" by null
reconstruct word
print "\t\rCase              : nomcase\ (nomcaseform)\n"
Exit loop Locative Case1
```

```
Enter loop Locative Case2
if $word = "itam"
nomcase= "Locative Case2"
nomcaseform="itam"
then substitute "itam" by null
reconstruct word
print "\t\tCase            : nomcaseX (nomcaseform)\n"
Exit loop Locative Case2

Enter loop Accusative Case
if $word = "E"
nomcase= "Accusative Case"
nomcaseform="E"
then substitute "E" by null
reconstruct word
print "\t\tCase            : nomcaseX (nomcaseform)\n"
Exit loop Accusative Case

Enter loop Plural Number1
if Sword = "kkalY"
nomcase= "Plural Number1"
nomcaseform="kkalY"
then substitute "kkalY" by null
reconstruct word
print "\t\tCase            : nomcaseX (nomcaseform)\n"
print "\t\tNumber                  : nomnum (nomnumform)\n"
Exit loop Plural Number1

Enter loop Plural Number2
if $word = "kalY"
nomcase= "Plural Number2"
nomcaseform="kalY"
then substitute "kalY" by null
reconstruct word
pnnt "\t\tCase            : nomcaseX (nomcaseform)\n"
print "\t\tNumber                  : nomnum (nomnumform)\n"
Exit loop Plural Number2

Enter loop ObliqueCase

if Sword = (.*)rYkalY
then substitute "(.*)rYkalY" by $1l
reconstruct word
elsif $word = (.*)rkalY
then substitute "(.*)rkalY" by $lnY
reconstruct word
elsif $word = (.*)fkalY
then substitute "(.*)fkalY" by $lm
reconstruct word
elsif $word = (.*)tkalY
then substitute "(.*)tkalY" by $UY
reconstruct word
elsif $word = (.*)kalY
then substitute "(.*)kalY" by $1
reconstruct word
elsif Sword = (.*ww)
```

```
then substitute "ww" by $1m
reconstruct word
elsif $word = (.*rY)rY
then substitute "(.*rY)rY" by $1u
reconstruct word
elsif fword = (.*t)t
then substitute "(.*t)t" by $lu
reconstruct word
elsif $word = (.*)t
then substitute "(.*)t" by $lu
reconstruct word
elsif Sword = (.*N)N
then substitute "(.*N)N" by $1
reconstruct word
elsif $word = (.*1Y)IY
then substitute "(.*IY)IY" by $1
reconstruct word
elsif $word = (.1)1
then substitute "(.1)1" by $1
reconstruct word
elsif Sword = (.*I)y
then substitute "(.*I)y" by $1
reconstruct word
elsif Sword = (.*i)y
then substitute "(.*i)y" by $1
reconstruct word
elsif $word = (.*E)y
then substitute "(.*E)y" by $1
reconstruct word
elsif Sword = (.*U)v
then substitute "(.*U)v" by $1
reconstruct word
elsif $word = (.*A)v
then substitute "(*A)v" by $1
reconstruct word
elsif Sword = (.*y)y
then substitute "(.*y)y" by $1
reconstruct word
elsif Sword = (.*nY)nY
then substitute "(.*nY)nY" by $1
reconstruct word
elsif Sword = (.*mp)
then substitute "(.*mp)" by $lu
reconstruct word
nombase= "ObliqueCase"
nombaseform="0"
print "\t\tOblique suffix: nombase\n"
Exit loop ObliqueCase
```

```
Enter loop Singular Number
if Sword = (.*tt)
then substitute "(.*)ww" by "$lm"
if Sword = s/(.*mp)/lu/

nomcase= "Singular Number"
nomcaseform="0"
then substitute "0" by null
reconstruct word
print "\t\tCase: nomcase\ (nomcaseform)\n"
print "\t\tNumber:       nomnum (nomnumform)\n"
Exit loop Singular Number

Enter loop NominativeCase
if$word = "0"
nomcase= "NominativeCase"
nomcaseform="0"
then substitute "0" by null
reconstruct word
print "\t\tCase: nomcase\ (nomcaseform)\n"
Exit loop NominativeCase

print "Noun Root:       $nounword\n";

Exit subroutine Noun()
```

Appendix I — b
Algorithm for the Pronoun Analyzer in the Hybrid Model

```
Enter subroutine Pronoun()
        Let pronword=word;
        Let proncase=" ";
        Let cliticform=" ";
        Let clitic=" ";
        Let prongnp=" ";
        Let prongnpform=" ";
        Let proncaseform=" ";
        Let pronbase=" ";

print "Pronoun Form:    $word\n\n";

Enter loop Clitic
Set i=0
Set length = length of clitic
Set word = length of word form
Set temp = word + length
if(i<=Clitic)
        && temp = $Clitic[$i])
then substitute clitic by null
reconstruct word
Set clitic=$Clitic[$i];
print "Choc:      $cliticform($clitic)\n";
i++
Exit loop Clitic

Enter loop DativcAdverbial
Set i=0
Set length = length of dat.adv
Set word = length of word form
Set temp = word + length
if(i<=Dat.Adv)
        && temp = $Dat.Adv[$i])
then substitute dat.adv by null
reconstruct word
Set dat.adv=$Dat.Adv[$i];
print "Dat.Adv:  $dat.advform($dat.adv)\n";
i++
Exit loop Dative.Adverbial
```

```
Enter loop Dative.Postposition
Set i=0
Set length = length of dat.postppn
Set word = length of word form
Set temp = word + length
if(i<=Dat.Postpn)
        && temp = $Dat.Postpn[$i])
then substitute dat.postppn by null
reconstruct word
Set dat.postppn=$Dat.Postpn[$i];
print "Dat.Postpn:        $dat.postppnform($dat.postppn)\n";
i++
Exit loop Dative.Postposition

Enter loop Accusative.Particle
Set i=0
Set length = length of acc.pl
Set word = length of word form
Set temp = word + length
if(i<=Acc.pl)
        && temp = $Acc.pl[$i])
then substitute acc.pl by null
reconstruct word
Set acc.pl=$Acc.pl[$i];
print "Acc.pl:    $acc.plform($acc.pl)\n";
i++
Exit loop Accusative.Particle

Enter loop Accusative.Postposition
Set i=0
Set length = length of acc.postppn
Set word = length of word form
Set temp = word + length
if(i<=Acc.postppn)
        && temp = $Acc.postppn[$i])
then substitute acc.postppn by null
reconstruct word
Set acc.postppn=$Acc.postppn($i];
print "Accpostppn:        $acc.postppnform($acc.postppn)\n";
i++
Exit loop Accusative.Postposition

Enter loop Nominative.Postposition
Set i=0
Set length = length of Nom.postppn
Set word =length of word form
Set temp = word + length
if(i<=Nom.postppn)
        && temp = $Nom.postppn[$i])
then substitute Nom.postppn by null
reconstruct word
Set Nom.postppn=$Nom.postppn[$i];
print "Nom.postppn:    $Nom.postppnform($Nom.postppn)\n";
i++
Exit loop Nominative.Postposition
```

```
Enter loop Nominative.Adverbial
Set i=0
Set length = length of Nom.adv
Set word = length of word form
Set temp = word + length
if(i<=Nom.adv)
        && temp = $Nom.adv[$i])
then substitute Nonxadv by null
reconstruct word
Set Nom.adv=$Nom.adv[$i];
print "Nom.adv:$Nom.advform($Nom.adv)\n";
i++
Exit loop Nominative.Adverbial

Enter loop GeninveParticle
Set i=0
Set length = length of Gen.pl
Set word = length of word form
Set temp = word + length
if(i<=Gen.pl)
        && temp = $Gen.pl[$i])
then substitute Gen.pl by null
reconstruct word
Set Gen.pl=$Gen.pl[$i];
print "Gen.pl:   $Gen.plform($Gen.pl)\n";
i++
Exit loop Genitive.Particle

Enter loop Nominative.Particle
Set i=0
Set length = length of Nom.pl
Set word = length of word form
Set temp = word + length
if(i<=Nom.pl)
        && temp = $Nom.pl[$i])
then substitute Nom.pl by null
reconstruct word
Set Nom.pl=$Nom.pl[$i];
print "Nom.pl:   $Nom.plform($Nom.pl)\n";
i++
Exit loop Nominative.Particle

Enter loop Genitive Case1
if Sword = "utEya"
proncase= "Genitive Case1"
proncaseform="utEya"
then substitute "utEya" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Genitive Case1

Enter loop Genitive Case2
if Sword = "anY"
proncase= "Genitive Case2"
proncaseform="anY"
then substitute "anY" by null
```

```
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
Exit loop Genitive Case2

Enter loop Genitive Case3
if $word = "awu"
proncase= "Genitive Case3"
proncaseform="awu"
then substitute "awu" by null
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
Exit loop Genitive Case3

Enter loop Benefactive Case1
if Sword = "akkAka"
proncase= "Benefactive Casel"
proncaseform="akkAka"
then substitute "akkAka" by null
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
Exit loop Benefactive Casel

Enter loop Benefactive Case2
if Sword = "arYkAka"
proncase= "Benefactive Case2"
proncaseform="arYkAka"
then substitute "arYkAka" by null
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
Exit loop Benefactive Case2

Enter loop Dative Casel
if Sword = "ukku/akku"
proncase= "Dative Casel"
proncaseform="ukku/akku"
then substitute "ukku/akku" by null
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
Exit loop Dative Casel

Enter loop Dative Case2
if Sword = "arYku"
proncase= "Dative Case2"
proncaseform="arYku"
then substitute "arYku" by null
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
Exit loop Dative Case2

Enter loop Sociative Casel
if Sword • "otu"
proncase= "Sociative Casel"
proncaseform="otu"
then substitute "otu" by null
reconstruct word
print "\t\tCase              : proncase\ (proncaseform)\n"
```

```
Exit loop Sociative Case1

Enter loop Sociative Case2
if Sword = "utanY"
proncase= "Sociative Case2"
proncaseform="utanY"
then substitute "utanY" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Sociative Case2

Enter loop Instrumental Case
if $word = "Al"
proncase= "Instrumental Case"
proncaseform="Al"
then substitute "Al" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Instrumental Case

Enter loop Ablative Casel
if Sword = "ilirunwu"
proncase= "Ablative Casel"
proncaseform="ilirunwu"
then substitute "ilirunwu" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Ablative Casel

Enter loop Ablative Case2
if Sword = "itamirunwu"
proncase= "Ablative Case2"
proncaseform="itamirunwu"
then substitute "itamirunwu" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Ablative Case2

Enter loop Locative Casel
if Sword = "il"
proncase= "Locative Casel"
proncaseform="il"
then substitute "il" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Locative Casel

Enter loop Locative Case2
if Sword = "itam"
proncase= "Locative Case2"
proncaseform="itam"
then substitute "itam" by null
reconstruct word
print "\t\tCase          : proncase\ (proncaseform)\n"
Exit loop Locative Case2
```

```
Enter loop Accusative Case
if Sword = "E"
proncase= "Accusative Case"
proncaseform="E"
then substitute "E" by null
reconstruct word
print "\t\rCase              : proncase\ (proncaseform)\n"
Exit loop Accusative Case

Enter loop GNP

if Sword = "ufkalY"
proncase= "Oblique"
prongnp="2nd.person,Plural/Honorific,(Masc/Fem "
prongnpform="ufkalY"
then substitute "ufkalY" by nIfkalY
reconstruct word
print "\t\tPronGNP form        : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "eVfkalY"
proncase= "Oblique"
prongnp="1st.person,Plural/Honorelsific,(Masc/Fem)"
prongnpform="eVfkalY"
then substitute "eVfkalY" by nAfkalY
reconstruct word
print "\t\tPronGNP form        : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "avalY"
proncase= "Oblique"
prongnp="3rd.person,Feminine"
prongnpform="avalY"
then substitute "avalY" by null
reconstruct word
print "\t\tPronGNP form        : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "avanY"
proncase= "Oblique"
prongnp="3rd.person,Masculine"
prongnpform="avanY"
then substitute "avanY" by null
reconstruct word
print "\t\tPronGNP form        : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "avar"
proncase= "Oblique"
prongnp="3rd.person,Honorelsific,(Masc/Fem)"
prongnp form="avar"
then substitute "avar" by null
reconstruct word
print "\t\tPronGNP form        : Sprongnp (Sprongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"
```

```
elsif $word = "awu"
proncase= "Oblique"
prongnp="3rd.person,Neuter"
prongnp form="awu"
then substitute "awu" by null
reconstruct word
print "\t\tPronGNP form : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

Exit loop GNP

Enter loop ObliqueCase

if $word = "eVnYnY"
proncase= "Oblique"
prongnp="1 st.person,(Masc/Fem)"
prongnpbase="nY"
prongnp form="eVnYnY"
then substitute "eVnYnY" by nAnY
reconstruct word
print "\t\tPronGNP form : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"


elsif Sword = "eVnY"
proncase= "Oblique"
prongnp="1st.person,(Masc/Fem)"
prongnpbase="0"
p rongnp form="eVnY"
then substitute "eVnY" by nAnY
reconstruct word
print "\t\tPronGNP form : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif Sword = "nAnY"
proncase= "Nominative"
prongnp="1st.person,(Masc/Fem)"
prongnp base="0"
prongnpform="nAnY"
then substitute "nAnY" by null
reconstruct word
print "\t\tPronGNP form : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif Sword = "unYnY"
proncase= "Oblique"
prongnp="2nd.person,(Masc/Fem"
prongnpbase="nY"
prongnp form="unYnY"
then substitute "unYnY" by nI
reconstruct word
print "\t\tPronGNP form : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif Sword = "unY"
proncase= "Oblique"
```

```
prongnp="2nd.person,(Masc/Fem"
prongnpbase="0"
prongnpform="unY"
then substitute "unY" by nI
reconstruct word
print "\t\tPronGNP form      : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif $word = "nI"
proncase= "Nominative"
prongnp="2nd.person,(Masc/Fem"
prongnpbase="0"
prongnpform="nI"
then substitute "nI" by null
reconstruct word
print "\t\tPronGNP    form    : $prongnp ($prongnpform)\n"
print "\t\tOblique suffix:: Spronbase\n"

elsif Sword = "eVmm"
proncase= "Oblique"
prongnp="1st.person,Hon.(Masc/Fem)"
prongnpbase="nY"
prongnpform="eVmm"
then substitute "eVmm" by yAm
reconstruct word
print "\AtPronGNP form      : $prongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif Sword = "eVm"
proncase= "Oblique"
prongnp="1st.person,Hon.(Masc/Fem)"
prongnpbase="0"
prongnpform="eVm"
then substitute "eVm" by yAm
reconstruct word
print "\t\tPronGNP form      : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif $word = "yAm"
proncase= "Nominative"
prongnp="1st.person,Hon.(Masc/Fem)"
prongnpbase="0"
prongnpform="yAm"
then substitute "yAm" by null
reconstruct word
print "\t\tPronGNP form      : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix:: $pronbase\n"

elsif Sword = "umm"
proncase= "Oblique"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="nY"
prongnpform="umm"
then substitute "umm" by nIr
reconstruct word
print "\t\tPronGNP    form    : Sprongnp ($prongnpform)\n"
```

```
print "\t\tOblique suffix: $pronbase\n"

elsif $word = "um"
proncase= "Oblique"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="0"
prongnpform="um"
then substitute "um" by nIr
reconstruct word
print "\t\tPronGNP form      : Sprongnp ($prongnpform)\n"
print "\t\rOblique suffix: $pronbase\n"

elsif Sword = "nIr"
proncase= "Nominative"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="0"
prongnpform="nIr"
then substitute "nlr" by null
reconstruct word
print "\t\tPronGNP    form    : $prongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "wanYnY"
proncase= "Oblique"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="nY"
prongnpform="wanYnY"
then substitute "wanYnY" by wAnY
reconstruct word
print "\t\tPronGNP form      : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "wanY"
proncase= "Oblique"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="0"
prongnpform="wanY"
then substitute "wanY" by wAnY
reconstruct word
print "\t\tPronGNP form      : $prongnp ($prongnpform)\n"
print "\t\tOblique suffix: Spronbase\n"

elsif Sword = "wamm"
proncase= "Oblique"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="m"
prongnpform="wamm"
then substitute "wamm" by wAm
reconstruct word
print "\t\tPronGNP form      : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "warn"
proncase= "Oblique"
prongnp="2nd.person,Hon.(Masc/Fem)"
prongnpbase="0"
```

```
prongnpform="wam"
then substitute "wam" by wAm
reconstruct word
print "\t\tPronGNP form        : $prongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "namm"
proncase= "Oblique"
prongnp="lst.person,plural(incl.)/Hon.(Masc/Fem)"
prongnpbase="m"
prongnpform="namm"
then substitute "namm" by nAm
reconstruct word
print "\t\tPronGNP form        : Sprongnp ($prongnpform)\n"
print "\t\rOblique suffix: $pronbase\n"

elsif fword = "nam"
proncase= "Oblique"
prongnp="1st.person,plural(incl.)/Hon.(Masc/Fem)"
prongnpbase="0"
prongnpform="nam"
then substitute "nam" by nAm
reconstruct word
print "\t\tPronGNP form        : fprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "wafkalY"
proncase= "Oblique"
prongnp="2nd.person,Honorific,(Masc/Fem)"
prongnpbase="m"
prongnp form="wafkalY"
then substitute "wafkalY" by wAfkalY
reconstruct word
print "\t\tPronGNP    form    : Sprongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

elsif Sword = "wafkalY"
proncase= "Oblique"
prongnp="2nd.person,Honorific,(Masc/Fem)"
prongnpbase="0"
prongnpform="wafkalY"
then substitute "wafkalY" by wAfkalY
reconstruct word
print "\t\tPronGNP form        : $prongnp ($prongnpform)\n"
print "\t\tOblique suffix: $pronbase\n"

Exit loop ObliqueCase


print "Pronoun Root:    Spronword\n";

Exit subroutine Pronoun()
```

Appendix I - c
Algorithm for the Numeral Analyzer in the Hybrid Model

```
Enter subroutine NumeralO
        Let nounword=word;
        Let numcase=" ";
        Let cliticform=" ";
        Let clitic=" ";
        Let numnum=" ";
        Let numcaseform=" ";
        Let numbase=" ";

print "Numeral Form:    $word\n\n";

Enter loop Clitic
Set i=0
Set length = length of clitic
Set word = length of word form
Set temp = word + length
if(i<=Clitic)
        && temp = $Clitic[$i])
then substitute clitic by null
reconstruct word
Set clitic=$Clitic[$i];
print "Clitic:     $cliticform($clitic)\n";
i++
Exit loop Clitic

Enter loop Oblique.Postposition
Set i=0
Set length = length of obl.postppn
Set word = length of word form
Set temp = word + length
if(i<=Obl.postppn)
        && temp = $Obl.postppn[$i])
then substitute obl.postppn by null
reconstruct word
Set obl.postppn=$Obl.postppn[$i];
print "Obl.postppn:        $obl.postppnform($obl.postppn)\n";
i++
Exit loop Oblique.Postposition

Enter loop Nominative.Particle1
Set i=0
Set length = length of Nom.pl1
Set word = length of word form
Set temp = word + length
if(i<=Nom.pl1)
        && temp = $Nom.pl1[$i])
then substitute Nom.pl1 by null
reconstruct word
Set Nom.pl1=$Nom.pl1[$i];
print "Nom.pl1: $Nom.pl1form($Nom.pl1)\n";
i++
Exit loop Nominative.Particle1
```

```
Enter loop Nominative.Particle2
Set i=0
Set length = length of Nom.pl2
Set word = length of word form
Set temp = word + length
if(i<=Nom.pl2)
        && temp = $Nom.pl2[$i])
then substitute Nom.pl2 by null
reconstruct word
Set Nom.pl2=$Nom.pl2[$i];
print "Nom.pl2: $Nom.pl2form($Nom.pl2)\n";
i++
Exit loop Nominative.Particle2

Enter loop Dative.Adverbial
Set i=0
Set length = length of dat.adv
Set word =length of word form
Set temp = word + length
if(i<=Dat.Adv)
        && temp = $Dat.Adv[$i])
then substitute dat.adv by null
reconstruct word
Set dat.adv=$Dat.Adv[$i];
print "Dat.Adv: $dat.advform($dat.adv)\n";
i++
Exit loop Dative.Adverbial

Enter loop Dative. Postposition
Set i=0
Set length = length of dat.postppn
Set word = length of word form
Set temp = word + length
if(i<=Dat.Postpn)
        && temp = $Dat.Postpn[$i])
then substitute dat.postppn by null
reconstruct word
Set dat.postppn=$Dat.Postpn[$i];
print "Dat.Postpn:        $dat.postppnform($dat.postppn)\n";
i++
Exit loop Dative.Postposition

Enter loop Accusative.Adverbial
Set i=0
Set length = length of accadv
Set word = length of word form
Set temp = word + length
if(i<=Acc.adv)
        && temp = $Acc.adv[$i])
then substitute accadv by null
reconstruct word
Set acc.adv=$Acc.adv[$i];
print "Acc.adv:  $accadvform(Saccadv)\n";
i++
Exit loop Accusative.Adverbial
```

```
Enter loop Accusative.Particle
Set i=0
Set length = length of acc.pl
Set word = length of word form
Set temp = word + length
if(i<=Acc.pl)
        && temp = $Acc.pl[$i])
then substitute acc.pl by null
reconstruct word
Set acc.pl=$Acc.pl[$i];
print "Acc.pl:    $acc.plform($acc.pl)\n";
i++
Exit loop Accusative.Particle

Enter loop Accusative.Postposition
Set i=0
Set length = length of accpostppn
Set word = length of word form
Set temp = word + length
if(i<=Accpostppn)
        && temp = $Acc.postppn[$i])
then substitute accpostppn by null
reconstruct word
Set acc.postppn=$Acc.postppn[$i];
print "Acc.postppn:      $acc.postppnform($acc.postppn)\n";
i++
Exit loop Accusative.Postposition

Enter loop Nominative.Postposition
Set i=0
Set length = length of Nom.postppn
Set word = length of word form
Set temp = word + length
if(i<=Nom.postppn)
        && temp = $Nom.postppn[$i])
then substitute Nom.postppn by null
reconstruct word
Set Nom.postppn=$Nom.postppn[$i];
print "Nom.postppn:    $Nom.postppnform($Nom.postppn)\n";
i++
Exit loop Nominative.Postposition

Enter loop Nominative.Adverbial
Set i=0
Set length = length of Nom.adv
Set word = length of word form
Set temp = word + length
if(i<=Nom.adv)
        && temp = $Nom.adv[$i])
then substitute Nom.adv by null
reconstruct word
Set Nom.adv=$Nom.adv[$i];
print "Nom.adv:$Nom.advform($Nom.adv)\n";
i++
Exit loop Nominative.Adverbial
```

```
Enter loop Genitive. Particle
Set i=0
Set length = length of Gen.pl
Set word =length of word form
Set temp = word + length
if(i<=Gen.pl)
        && temp = $Gen.pl[$i])
then substitute Gen.pl by null
reconstruct word
Set Gen.pl=$Gen.pl[$i];
print "Gen.pl:   $Gen.plform($Gen.pl)\n";
i++
Exit loop Genitive.Particle

Enter loop Nominative.Particle
Set i=0
Set length = length of Nom.pl
Set word = length of word form
Set temp = word + length
if(i<=Nom.pl)
        && temp = $Nom.pl[$i])
then substitute Nom.pl by null
reconstruct word
Set Nom.pl=$Nom.pl[$i];
print "Nom.pl:   $Nom.plform($Nom.pl)\n";
i++
Exit loop Nominative.Particle

Enter loop Genitive Case1
if Sword = "utEya"
numcase = "Genitive Case1"
numcaseform="utEya"
then substitute "utEya" by null
reconstruct word
print "\t\tCase          : numcase\ (numcaseform)\n"
Exit loop Genitive Case1

Enter loop Genitive Case2
if Sword = "inY"
numcase= "Genitive Case2"
numcaseform="inY"
then substitute "inY" by null
reconstruct word
print "\t\tCase          : numcase\ (numcaseform)\n"
Exit loop Genitive Case2

Enter loop Genitive Case3
if Sword = "awu"
numcase= "Genitive Case3"
numcaseform="awu"
then substitute "awu" by null
reconstruct word
print "\t\rCase          : numcase\ (numcaseform)\n"
Exit loop Genitive Case3
```

```
Kilter loop Benefactive Casel
if Sword = "ukkAka"
numcase= "Benefactive Casel"
numcaseform="ukkAka"
then substitute "ukkAka" by null
reconstruct word
print "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Benefactive Casel

Enter loop Benefactive Case2
if Sword = "irYkAka"
numcase= "Benefactive Case2"
numcaseform="irYkAka"
then substitute "irYkAka" by null
reconstruct word
print "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Benefactive Case2

Enter loop Dative Casel
if Sword = "ukku"
numcase= "Dative Case1"
numcaseform="ukku"
then substitute "ukku" by null
reconstruct word
pnnt "\t\rCase              : numcase\ (numcaseform)\n"
Exit loop Dative Casel

Enter loop Dative Case2
if $word = "irYku"
numcase= "Dative Case2"
numcaseform="irYku"
then substitute "rrYku" by null
reconstruct word
pnnt "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Dative Case2

Enter loop Sociative Casel
if Sword ="otu"
numcase= "Sociative Casel"
numcaseform="otu"
then substitute "otu" by null
reconstruct word
pnnt "\t\rCase              : numcase\ (numcaseform)\n"
Exit loop Sociative Casel

Enter loop Sociative Case2
if Sword = "utanY"
numcase= "Sociative Case2"
numcaseform="utanY"
then substitute "utanY" by null
reconstruct word
print "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Sociative Case2

Enter loop Instrumental Case
if $word = "Al"
```

```
numcase= "Instrumental Case"
numcaseform="Al"
then substitute "Al" by null
reconstruct word
print "\t\tCase              : numcaseX (numcaseform)\n"
Exit loop Instrumental Case

Enter loop Ablative Case1
if Sword = "ilirunwu"
numcase= "Ablative Case1"
numcaseform="ilirunwu"
then substitute "ilirunwu" by null
reconstruct word
print "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Ablative Case1

Enter loop Ablative Case2
if Sword = "itamirunwu"
numcase= "Ablative Case2"
numcaseform="itamirunwu"
then substitute "itamirunwu" by null
reconstruct word
print "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Ablative Case2

Enter loop Locative Case1
if Sword = "il"
numcase= "Locative Case1"
numcaseform="il"
then substitute "il" by null
reconstruct word
print "\t\tCase              : numcase\ (numcaseform)\n"
Exit loop Locative Case1

Enter loop Locative Case2
if Sword = "itam"
numcase= "Locative Case2"
numcaseform="itam"
then substitute "itam" by null
reconstruct word
print "\t\tCase              : numcaseX (numcaseform)\n"
Exit loop Locative Case2

Enter loop Accusative Case
if $word = "E"
numcase= "Accusative Case"
numcaseform="E"
then substitute "E" by null
reconstruct word
print "\t\tCase              : numcaseX (numcaseform)\n"
Exit loop Accusative Case

Enter loop GNP
if Sword = "avanY"
numcase= "Oblique"
numgnp="3rd.person,Singular,Masculine"
```

```
numgnp form="avanY"
then substitute "avanY" by null
reconstruct word
print "\t\tCase            : numcase\ (nurncaseform)\n"
print "\t\tGNP suffix    : $numgnp ($numgnpform)\n"

elsif $word = "wwi"
numcase= "Oblique"
numgnp="3rd.person,Singular,Feminine"
numgnp form="wwi"
then substitute "wwi" by null
reconstruct word
print "\t\tCase            : numcase\ (numcaseform)\n"
print "\t\rGNP suffix    : $numgnp ($numgnpform)\n"

elsif Sword = "avar"
numcase= "Oblique"
numgnp="3rd.person,Singular,Honorific "
numgnpform="avar"
then substitute "avar" by null
reconstruct word
print "\t\tCase            : numcase\ (numcaseform)\n"
print "\t\tGNP suffix    : $numgnp ($numgnpform)\n"

Exit loop GNP

Enter loop Plural Numberl
if Sword = "kalY"
numcase= "Plural Numberl"
numcaseform="kalY"
then substitute "kalY" by null
reconstruct word
print "\t\tCase            : numcase\ (numcaseform)\n"
print "\t\tNumber                  : numnum (numnumform)\n"
Exit loop Plural Numberl

Enter loop Oblique Case

if Sword = (.*nY)nY
then substitute "(.*nY)nY" by $1
reconstruct word
elsif Sword = (.*mp)
then substitute "(.*mp)" by $1u
reconstruct word
numbase= "Oblique Case"
numbaseform="0"
print "\t\tOblique suffix: numbase\n"
Exit loop Oblique Case

Enter loop Singular Number
if Sword = (.*tt)
then substitute "(.*)ww" by "$1m"
if $word = s/(.*mp)/1u/

numcase= "Singular Number"
numcaseform="0"
```

```
then substitute "0" by null
reconstruct word
print "\t\tCase: numcase\ (numcaseform)\n"
print "\t\tNumber:      numnum (numnumform)\n"
Exit loop Singular Number

Enter loop NominativeCase
if $word = "0"
numcase= "NominativeCase"
numcaseform="0"
then substitute "0" by null
reconstruct word
print "\t\tCase: numcase\ (numcaseform)\n"

Exit loop NominativeCase

print "Numeral Root:    $nounword\n";

Exit subroutine Numeral()
```

Appendix I — d
Algorithm for the Verb Analyzer in the Hybrid Model

```
Enter subroutine Verb()
        Let verbword=word;
        Let tam=" ";
        Let diticform=" ";
        Let ditic=" ";
        Let nomnum=" ";
        Let tamform=" ";
        Let nombase=" ";

print "Verb Form:        $word\n\n";

Enter loop Vocative
Set i=0
Set length = length of vocative
Set word = length of word form
Set temp = word + length
if(i<=Vocative)
        && temp = $Vocative[$i])
then substitute vocative by null
reconstruct word
Set vocative=$Vocative[$i];
print "Vocative: $vocativeform($vocative)\n";
i++
Exit loop Vocative

Enter loop Clitic
Set i=0
Set length = length of clitic
Set word = length of word form
Set temp = word + length
if(i<=Clitic)
        && temp = $Clitic[$i])
then substitute clitic by null
reconstruct word
Set clitic=$Clitic[$i];
print "Clitic:      $cliticform($clitic)\n";
i++
Exit loop Clitic

Enter loop VerbGNP
Set i=0
Set length = length of vbgnp
Set word = length of word form
Set temp = word + length
if(i<=VerbGNP)
        && temp = $VerbGNP[$i])
then substitute vbgnp by null
reconstruct word
Set vbgnp=$VerbGNP[$i];
print "VerbGNP:         $vbgnpform($vbgnp)\n";
i++
```

```
if $word = "elY"
vbgnp="elY"
vbgnpform="2nd.person,plur/hon,masc/fem,brahm."
then substitute "elY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t → ($vbgnp)\n";

elsif Sword = "om"
vbgnp="om"
vbgnpform="1st.person,plur,masc/fem"
then substitute "om" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t → ($vbgnp)\n";

elsif Sword = "fko"
vbgnp="fko"
vbgnpform="2nd.person,plur/hon,masc/fem,brahm."
then substitute "fko" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t→ ($vbgnp)\n";

elsif $word = "ufkalY"
vbgnp="ufkalY"
vbgnpform="2nd.person,plur/hon,masc/fem,lit."
then substitute "ufkalY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t → ($vbgnp)\n";

elsif$word = "enY"
vbgnp="enY"
vbgnpform="1st.person,sing,masc/fem"
then substitute "enY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t→ ($vbgnp)\n";

elsif Sword = "AnY"
vbgnp="AnY"
vbgnpform="3rd.person,sing,masc"
then substitute "AnY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t —» (fvbgnp)\n";

elsif $word = "AlY"
vbgnp="AlY"
vbgnpform="3rd.person,sing,fem"
then substitute "AlY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t→ ($vbgnp)\n";

elsif Sword = "ArkalY"
vbgnp="ArkalY"
vbgnpform="3rd.person,plur/hon,masc/fem,lit."
then substitute "ArkalY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t→ ($vbgnp)\n";
```

```
elsif Sword = "Ar"
vbgnp="Ar"
vbgnpform="3rd.person,plur/hon,masc/fem"
then substitute "Ar" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t→ ($vbgnp)\n";

elsif Sword = "IrkalY"
vbgnp="IrkalY"
vbgnpform="2nd.person,plur/hon,masc/fem"
then substitute "IrkalY" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t→ ($vbgnp)\n";

elsif Sword = "Ir"
vbgnp="Ir"
vbgnpform="2nd.person,plur/hon,masc/fem,lit."
then substitute "Ir" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t→ ($vbgnp)\n";

elsif Sword = "Ay"
vbgnp="Ay"
vbgnpform="2nd.person,sing,masc/fem"
then substitute "Ay" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t→ ($vbgnp)\n";

elsif Sword = "awu"
vbgnp="awu"
vbgnpform="3rd.person,sing,neut"
then substitute "awu" by null
reconstruct word
print "\t\tVerb GNP suffix      : $vbgnpform\n\t\t\t\t\t\t→ ($vbgnp)\n";

Exit loop VerbGNP

Enter loop NonFinite.Particle2
Set i=0
Set length = length of nonfin.pl2
Set word = length of word form
Set temp = word + length
if(i<=NonFin.Pl2)
        && temp = $NonFin.Pl2[$i]
then substitute nonfin.pl2 by null
reconstruct word
Set nonfin.pl2=$NonFin.Pl2[$i];
print "NonFin.P12:          $nonfin.pl2form($nonfin.pl2)\n";
i++
Exit loop NonFinite.Particle2

Enter loop NonFinite.Particle1
Set i=0
Set length = length of nonfin.pll
Set word = length of word form
Set temp = word + length
```

```
if(i<=NonFin.Pl1)
        && temp = $NonFin.Pl1[$i])
then substitute nonfin.pl1 by null
reconstruct word
Set nonfin.pl1=$NonFin.Pl1[$i];
print "NonFin.Pl1:        $nonfin.pl1form($nonfin.pl1)\n";
i++
Exit loop NonFinite.Particle1

Enter loop Auxiliary Verb
Set i=0
Set length = length of auxvb
Set word = length of word form
Set temp = word + length
if(i<=AuxVb)
        && temp = $AuxVb[$i])
then substitute auxvb by null
reconstruct word
Set auxvb=$AuxVb[$i];
print "AuxVb:    $auxvbform($auxvb)\n";
i++
Exit loop Auxiliary Verb

Enter loop Adverbial
Set i=0
Set length = length of adv
Set word = length of word form
Set temp = word + length
if(i<=Adv)
        && temp = $Adv[$i])
then substitute adv by null
reconstruct word
Set adv=$Adv[$i];
print "Adv:        $advform($adv)\n";
i++
Exit loop Adverbial

Enter loop Prohibitive
if $word = "Aw"
tam= "Prohibitive"
tamform="Aw"
then substitute "Aw" by null
reconstruct word
print "\t\tTAM            : $tam ($tamform)\n";
print "\t\tBase           : $vbbase\n";
Exit loop Prohibitive

Enter loop Positive Conditional
if Sword = "A1"
tam= "Positive Conditional"
tamform="Al"
then substitute "Al" by null
reconstruct word
print "\t\tTAM            : $tam ($tamform)\n";
print "\t\tBase           : $vbbase\n";
Exit loop Positive Conditional
```

```
Enter loop Admonitive
if Sword = "a"
tam= "Admonitive"
tamform= "a"
then substitute "a" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Admonitive

Enter loop Hortative
if Sword = "lAm"
tam= "Hortative"
tamform="lAm"
then substitute "lAm" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Hortative

Enter loop Negative Future
if Sword = "mAtt"
tam= "Negative Future"
tamform="mAtt"
then substitute "mAtt" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Negative Future

Enter loop Negative Past
if Sword ="illE"
tam= "Negative Past"
tamform="illE"
then substitute "illE" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Negative Past

Enter loop Negative Verbal Participle
if Sword = "Amal"
tam= "Negative Verbal Participle"
tamform="Amal"
then substitute "Amal" by null
reconstruct word
print "\t\tTAM          : Stam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Negative Verbal Participle

Enter loop Negative Adjectival Participle
if Sword = "Awa"
tam= "Negative Adjectival Participle"
tamform="Awa"
then substitute "Awa" by null
```

```
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Negative Adjectival Participle

Enter loop Present Adjectival Participle
if $word = "kirYa"
tam= "Present Adjectival Participle"
tamform="kirYa"
then substitute "kirYa" by null
reconstruct word
print "\t\tTAM          : $tam (Stamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Present Adjectival Participle

Enter loop Habitual Participle
if Sword = "um"
tam= "Habitual Participle"
tamform="um"
then substitute "um" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Habitual Participle

Enter loop Past Durauve Conditional
if Sword = "koVNtirunw"
tam= "Past Duranve Conditional"
tamform="koVNtirunw"
then substitute "koVNtirunw" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Past Durative Conditional

Enter loop Non-Past Duranve Conditional
if Sword = "koVNtirukkirY"
tam= "Non-Past Durauve Conditional"
tamform="koVNtirukkirY"
then substitute "koVNtirukkirY" by null
reconstruct word
print "\t\tTAM          : $tam (Stamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Non-Past Durauve Conditional

Enter loop Negative Conditional
if Sword = "AvittAl"
tam= "Negative Conditional"
tamform="AvittAl"
then substitute "AvittAl" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Negative Conditional
```

```
Enter loop Positive Verbal Participle
if Sword = "i/u"
tam= "Positive Verbal Participle"
tamform="i/u"
then substitute "i/u" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Positive Verbal Participle

Enter loop Present
if $word = "kirY/kkirY"
tam= "Present"
tamform="kirY/kkirY"
then substitute "kirY/kkirY" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Present

Enter loop Past
if Sword = "t/w/nw/ww/inY/rY"
tam= "Past"
tamform="t/w/nw/ww/inY/rY"
then substitute "t/w/nw/ww/inY/rY" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Past

Enter loop Future
if Sword = "v/p/pp"
tam= "Future"
tamform="v/p/pp"
then substitute "v/p/pp" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Future

Enter loop Infinitive
if Sword = "a"
tam= "Infinitive"
tamform="a"
then substitute "a" by null
reconstruct word
print "\t\tTAM          : $tam (Stamform)\n";
print "\t\tBase         : Svbbase\n";
Exit loop Infinitive

Enter loop Non-Finite
if Sword = (.*)tk
then substitute "(.*)tk" by $1IY
reconstruct word
elsif Sword = (.*1Y)
then substitute "(.*IY)" by $1
```

```
reconstruct word
elsif $word = (.*kalYY)
then substitute "(.*kalYY)" by $1
reconstruct word
elsif $word = (.*)lYY
then substitute "(.*)lYY" by $lu
reconstruct word
elsif $word = (.*Ak)
then substitute "(.*Ak)" by $lu
reconstruct word
elsif Sword = (.*cA)k
then substitute "(.*cA)k" by $1
reconstruct word
elsif Sword = (.*l)l
then substitute "(.1)1" by $1
reconstruct word
elsif Sword = (.*y)y
then substitute "(.*y)y" by $1
reconstruct word
elsif $word = (.*nY)
then substitute "(.*nY)" by $1
reconstruct word
elsif $word = (.*kk)
then substitute "(.*kk)" by $1
reconstruct word
elsif Sword = (.*aNN)
then substitute "(.*aNN)" by $1u
reconstruct word
elsif $word = (.*N)
then substitute "(.*N)" by $1
reconstruct word
elsif Sword = (.*lY)lY
then substitute "(.*lY)lY" by $1
reconstruct word
elsif Sword = (.*)rYk
then substitute "(.*)rYk" by $1l
reconstruct word
elsif $word = (.*o)k
then substitute "(*o)k" by $1
reconstruct word
elsif Sword = (.*o)t
then substitute "(.*o)t" by $1
reconstruct word
elsif Sword = (.*UN)
then substitute "(.*UN)" by $1
reconstruct word
elsif Sword = (.*uN)N
then substitute "(.*uN)N" by $1
reconstruct word
elsif Sword = (.*var)
then substitute "(.*var)" by vA
reconstruct word
elsif Sword = (.*fk)
then substitute "(.*fk)" by $lu
reconstruct word
```

```
print "\t\tTAM          : $tam (ftamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Infinitive

Enter loop Imperative
if Sword = "0"
tam= "Imperative"
tamform="0"
then substitute "0" by null
reconstruct word
print "\t\tTAM          : $tam ($tamform)\n";
print "\t\tBase         : $vbbase\n";
Exit loop Imperative

print "Verb Root        $verbword\n";

Exit subroutine Verb()
```

Appendix I — e
Algorithm for the Adjective Analyzer in the Hybrid Model

```
Enter subroutine Adjective()
        Let adjword=word;
        Let diticform=" ";
        Let clitic=" ";
        Let adjbaseform=" ";
        Let adjbase=" ";

print "Adjective Form:   $word\n\n";

Enter loop Clitic
Set i=0
Set length = length of clitic
Set word = length of word form
Set temp = word + length
if(i<=Clitic)
        && temp = $Clitic[$i])
then substitute clitic by null
reconstruct word
Set clitic=$Clitic[$i];
print "Clitic:     $cliticform($clitic)\n";
i++
Exit loop Clitic

Enter loop Bound.Postposition
Set i=0
Set length = length of bd.postppn
Set word = length of word form
Set temp = word + length
if(i<=Bd.postppn)
        && temp = $Bd.postppn[$i])
then substitute bd.postppn by null
reconstruct word
Set bd.postppn=$Bd.postppn[$i];
print "Bd.postppn:       $bd.postppnform($bd.postppn)\n";
i++
Exit loop Bound.Postposition

Enter loop Free.Particle1
Set i=0
Set length = length of Fr.pll
Set word = length of word form
Set temp = word + length
if(i<=Fr.pl1)
        && temp = $Fr.pll[$i])
then substitute Fr.pll by null
reconstruct word
Set Fr.pl1=$Fr.pl1[$i];
print "Fr.pll:     $Fr.pl1form($Fr.pl1)\n";
i++
Exit loop Free.Particle1
```

```
Enter loop Free.Particle2
Set i=0
Set length = length of Ft.pl2
Set word = length of word form
Set temp = word + length
if(i<=Fr.pl2)
        && temp = $Fr.pl2[$i])
then substitute Fr.pl2 by null
reconstruct word
Set Fr.pl2=$Fr.pl2[$i];
print "Fr.pl2:     $Fr.pl2form($Fr.pl2)\n";
i++
Exit loop Free.Particle2

Enter loop GNP
if Sword = "avanY"
adjbase= "Bound"
adjgnp="3rd.person,Singular,Masculine"
adjgnpform="avanY"
then substitute "avanY" by null
reconstruct word
print "\t\t Base          : adjbase\ (adjbaseform)\n"
print "\t\rGNP suffix   : Sadjgnp (Sadjgnpform)\n"

elsif Sword = "avalY"
adjbase= "Bound"
adjgnp="3rd.person,Singular,Feminine"
adjgnpform="avalY"
then substitute "avalY" by null
reconstruct word
print "\t\t Base          : adjbase\ (adjbaseform)\n"
print "\t\rGNP suffix   : $adjgnp ($adjgnpform)\n"

elsif Sword = "avarkalY"
adjbase= "Bound"
adjgnp="3rd.person,Plural/Honorific "
adjgnpform="avarkalY"
then substitute "avarkalY" by null
reconstruct word
print "\t\t Base          : adjbase\ (adjbaseform)\n"
print "\t\rGNP suffix   : Sadjgnp ($adjgnpform)\n"

elsif Sword = "avar"
adjbase= "Bound"
adjgnp="3rd.person,Singular,Honorific "
adjgnp form= "avar"
then substitute "avar" by null
reconstruct word
print "\t\t Base          : adjbase\ (adjbaseform)\n"
print "\t\tGNP suffix   : Sadjgnp ($adjgnpform)\n"
```

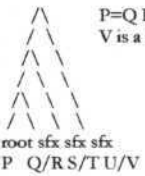
```
elsif $word = "awu"
adjbase= "Bound"
adjgnp="3rd.person,Neuter"
adjgnp form="awu"
then substitute "awu" by null
reconstruct word
print "\t\t Base            : adjbase\ (adjbaseform)\n"
print "\t\tGNP suffix    : $adjgnp ($adjgnpform)\n"

Exit loop GNP

Enter loop Bound Base

if $word = nalla(.*)
then substitute "nalla(.*)" by $1
adjbase= "Bound Base"
adjbaseform="0"
reconstruct word
elsif $word = (.*)iya
then substitute "(.*)iya" by $1
adjbase= "Bound Base"
adjbaseform="iya"
reconstruct word
print "\t\tBound suffix : adjbase\n"
Exit loop Bound Base

Enter loop Free Base
if $word = "nalla|puwu [^A-Za-z]"
adjbase= "Free Base"
adjbaseform="0"
then substitute "0" by null
reconstruct word
print "\t\t Base:ad)base\ (ad)baseform)\n"

Exit loop Free Base

print "Adjective Root:    $adjword\n";

Exit subroutine AdjectiveO
```

Appendix II
Database for the AMPLE Analyzer in Tamil (AMPLE Version - 1.7)

2A. The Data Analysis File

\id tamadOl.ctl analysis data

The category tests propogate categories progressively from the root out to the last suffix.




```
============================================================
\begin
============================================================
\co              DEFINE STRING CLASSES (\scl)

\scl   V         aAiIuUeEYoOW          |Vowels
\scl   Vsh       a i u e o             | Short Vowels
\sd    Vlg       A I U E O             |Long Vowels
\sd    Vhg       i I u U               |High Vowels
\sd    Vlw       a A o O               | Low Vowels
\sd    Vft       i I e E               | Front vowds
\sd    Vbk       u U o O               |Back vowels
\sd    Vd        WY                    |Dipthongs
\sd    Nas       F f N n M m           |Nasals
\sd    G         v y                   | Fnctionless continuants
\sd    Liq       r l Z L               | Liquids
\sd    C         k c t w p R           | Obstruents

============================================================
Exclusion Class Sets:

\sd    Casexl      y u i Y I t M m a f L R v
\sd    Casex2  u i YZ I N l t M m a f Ly vr
\sd    Casex3  u YZ I Nl t M m a f LRvr
\sd    Casex4      y u i Y Z I N l t M m a f L R v r
\sd    Casex5      y u i Y Z I N l M m a f LRvr
\sd    Casex6      y u i Y Z I N l t M m f L R v r
\sd    Casex7      y u i Y Z I N l t M m a f R v r
\sd    Casex8      y u i Y Z I N l t m a f L R v r
\sd    Casex9      yuiYZINt MmafLRvr
\sd    CasexlO     y u i Y Z I N l t M m a f L R r
\sd    Casexll     y u i Y Z I N l t MafLRr
\sd    Pastx1    N L Z l y t R r k w n w w w e u O o i a
\sd    Pastx2    M L Z l y R r k w n w w w e u O o i a
\sd    Pastx3    N M L Z l t R r k n w w w e u O o i a
```

```
\scl    Pastx4      NMLZlytRrknwweuOo
\sd     Pastx5      NLZlytrkwnw wweuOoia
\sd     Pastx6      MNLZlytrkwRwweOi
\sd     Pastx7      MNLZlytrwRwweuOI
\scl    Futx1       MLZlyrkwnw wweuOoia
\scl    Futx2       NLAZlyRrkwnwwweOo
\sd     Futx3       NMtRrkwnwwweuo1a
\sd     Nfinx1      LZlyrMNkeuoia
\sd     Nfinx2      LZtyrMNkeuoia
\sd     Nfinx3      LZltrMNyeuoia
\sd     Nfinx4      LZltrMkeuoia
\sd     Nfinx5      lZtyrMNeuoia
\sd     Nfinx6      LZtlyrMNkeoa
\sd     Nfinx7      LlyrMNkeuoiae
\sd     PosVbPplx1  NMLZytRrkwnwwweuOoia
\sd     PosVbPplx2  LMZlyRrkwnwwweuOoia
\sd     PosVbPplx3  NLMZltRrkwnwwweuOoia
\sd     PosVbPplx4  NLMZlytRrkw nw ww u Oo a
\sd     PosVbPplx5  NLZlytRrkwnwwweuOo1a
\sd     PosVbPplx6  NLMZlytRrkwnwwweuO1
\sd     PosVbPplx7  NLMZlytRrwnwwweuOo1a

\co             DEFINE MORPHEME CLASSES (\md)

\mcl    GenAdv      Adv.Gen
\mcl    GenDatAdv   Adv.Dat/Gen
\mcl    PpnNom      Ppn.Nom
\mcl    PpnDat      Ppn.Dat
\mcl    PpnGen      Ppn.Gen
\mcl    PpnNomDat   Ppn.Nom/Dat
\mcl    PlNom       Pl.Nom
\md     PlAcc       Pl.Acc
\md     PlObl       Pl.Obl
\md     PastAdjPpl  PastAdj.Ppl
\md     PresAdjPpl  Pres.Adj.Ppl
\md     Admon       Adm.
\md     AdjGNP      3SM.pe 3SF.pe 3S.hon.pe 3SN.pe
\md     VbGNP       lS.pe 1P.incl.pe 2S.pe 2S.hon.pe 2S.hon/2P.pe 3SM.pe 3SF.pe
                    3S.hon.pe 3SN.pe
\md     Aux1        Aux.Vbl
\md     Aux2        Aux.Vb2

\co             DEFINE MORPHEME PROPERTIES (\mp)

\co             DEFINE CATEGORIES (\ca)
\ca                     Verb Noun Adjective Pronoun Numeral

\co             DEFINE CATEGORY CLASSES (\cd)
\cd     finalcategory   Verb Noun Adjective Pronoun Numeral
```

```
==========================================================
\co          ROOTS
\maxr 1      maximum number of roots
\co          Compound Root Categories (\cr)
\co          Root Tests (\rt)
\co          Root Adhoc Pairs (\rah)

==========================================================
\co          SUFFIXES
\co          Suffix Tests (\st)
\st          PROGRESSIVE_CATEGORY_ST
             left to category is current from category
\co          Suffix Adhoc Pairs (\sah)

==========================================================
\co          FINAL TESTS (\ft)
\ft          FINAL_CATEGORY_FT
             FINAL tocategory is member [finalcategory]

==========================================================
\co          MORPHEME CO-OCCURRENCE CONSTRAINTS (\mcc)

\mcc  GenAdv          +/Gen2.cs_
\mcc  GenDatAdv       +/Gen2.cs_ +/Dat.cs_
\mcc  Past.tns        +/_~Inf +/_VbGNP
\mcc  Pres.tns        +/_VbGNP +/_~Inf.
\mcc  Inf.            +/~Pres.Adj.Ppl_
\mcc  AdjGNP          +/Obl.Qlf_
\mcc  Pos.Cndl        +/~3SM.pe_
\mcc  Adm.            +/VbGNP_ ;+/~Past.tns_
\mcc  Pres.Adj.Ppl    +/_~VbGNP
\mcc  Aux1            +/Inf._+/_~Adm.
\mcc  Aux2            +/Pos.Vbl.Ppl_ +/_~Past.tns +/_~PastAdjPpl

==========================================================
```

The Root Lexicon

\id tamroot.dic root dictionary

\r	Record marker
\a	Allomorph
\c	Category pair from/to
\mp	Morpheme property
\ge	English Gloss
\co	Comment
\noload	Do not load
\nocap	No caps change

NOUNS

Field	**Root/Stem**	**Phonological Constraint(s)**	Morphological **Constraint(s)**
\r	AN		
\a	AN	-	-
\c	Noun		
\ge	male		
\r	ARu		
\a	ARu	/_~[V]	-
\a	AR	/_~[V]	+/_~Plr.num
\c	Noun		
\ge	river		
\r	eli		
\a	eli	/_~[V]	-
\c	Noun		
\ge	mouse		
\r	ilY		
\a	ilY	/_~[V]	-
\c	Noun		
\ge	leaf		
\r	iwaZ		
\a	iwaZ	-	-
\c	Noun		
\ge	**petal**		
V	I		
\a	I	/_~[V]	-
\c	Noun		
\gP	%		
\r	**kaN**		
\a	kaN	/_~[V]	-
\c	Noun		
\ge	eye		

\r	kAl		
\a	kAl	-	-
\c	Noun		
\ge	leg		
\r	kAtu		
\a	kAtu	/_~[V]	-
\a	kAt	/_~[V]	+/_~Plr.num
\c	Noun		
\ge	forest		
\r	maMrwaM		
\a	maMrwaM	-	+/_~Plr.num
\a	maMrwar	-	-
\c	Noun		
\ge	man		
\r	maram		
\a	maram	/_~[V]	+/_~Plr.num
\a	maraf	/_~[V]	-
\a	mara	/_~[V]	+/_~Plr.num
\c	Noun		
\ge	tree		
\r	muL		
\a	muL	/_~[V]	+/_~Plr.num
\a	mut	/_~[V]	-
\c	Noun		
\ge	thorn		
\r	mAM		
\a	mAM		
\c	Noun		
\ge	thorn		
\r	narampu		
\a	narampu	/_~[V]	-
\a	naramp	-	+/_~Plr.num
\c	Noun		
\ge	vein		
\r	nAy		
\a	nAy		
\c	Noun		
\ge	dog		
\r	poM		
\a	poM	/_~[V]	+/_~Plr.num
\c	Noun		
\ge	gold		
\r	poy		
\a	poy	/_~[V]	-
\c	Noun		
\ge	lie		

\r	pul		
\a	pul	/_~[V]	+/_~Plr.num
\a	puR	/_~[V]	-
\c	Noun		
\ge	grass		
\r	poruL		
\a	poruL	-	+/_~Plr.num
\a	porut	/_~[V]	-
\c	Noun		
\ge	thing		
\r	pU		
\a	pU	/_~[V]	-
\c	Noun		
\ge	flower		
\r	vaNtu		
\a	vaNtu	/_~[V]	-
\a	vaNt	-	+/_~Plr.num
\c	Noun		
\ge	beetle		
\r	wEr		
\a	wEr	-	-
\c	Noun		
\ge	chariot		
\r	wOL		
\a	wOL	-	-
\c	Noun		
\ge	shoulder		

PRONOUNS

Field	Root/Stem	Phonological Constraint(s)	Morphological Constraint(s)
\r	avaL		
\a	avaL	-	-
\c	Pronoun		
\ge	she(3SF)		
\r	avaM		
\a	avaM	-	-
\a	Pronoun		
\ge	he(3SM)		
\r	avar		
\a	avar	-	-
\c	Pronoun		
\ge	he/she(3hon)		

\r avE
\a avE - -
\a avaRR - -
\c Pronoun
\ge he/she(3hon)

\r awu
\a awu - -
\a aw - -
\c Pronoun
\ge it(3SN)

\r nAM
\a nAM - -
\a eM - -
\c Pronoun
\ge I(1S)

\r nAfkaL
\a nAfkaL - -
\a efkaL - -
\c Pronoun
\ge we(1P)

\r nI
\a nI - -
\a uM - -
\c Pronoun
\ge you(2S)

\r nIfkaL
\a nIfkaL - -
\a ufkaL - -
\c Pronoun
\ge you(2P)

\r nIr
\a nIr - -
\a um - -
\c Pronoun
\ge you(2S.hon)

\r yAm
\a yAm - -
\a em - -
\c Pronoun
\ge I(1S.hon)

\r wAfkaL
\a wAfkaL - -
\a wafkaL - -
\c Pronoun
\ge you(2S.hon)

\r	wAm		
\a	wAm	-	-
\a	wam	-	-
\c	Pronoun		
\ge	you(2S.hon)		
\r	wAM		
\a	wAM	-	-
\a	waM	-	-
\c	Pronoun		
\ge	you(2S.reflx)		
\r	nAm		
\a	nAm	-	-
\a	nam	-	-
\c	Pronoun		
\ge	we(1P.incl)		

NUMERALS

Field	Root/Stem	Phonological Constraint(s)	Morphological Constraint(s)
\r	avaL		
\a	avaL	-	-
\c	Pronoun		
\ge	she(3SF)		
\r	avaM		
\a	avaM	-	-
\a	Pronoun		
\ge	he(3SM)		
\r	avar		
\a	avar	-	-
\c	Pronoun		
\ge	he/she(3hon)		
\r	awu		
\a	awu	-	-
\a	aw	-	-
\c	Pronoun		
\ge	it(3SN)		
\r	nAM		
\a	nAM	-	-
\a	eM	-	-
\c	Pronoun		
\ge	I(1S)		
\r	nAfkaL		
\a	nAfkaL	-	-
\a	efkaL	-	-
\c	Pronoun		
\ge	we(1P)		

\r nI
\a nI - -
\a uM - -
\c Pronoun
\ge you(2S)

\r nIfkaL
\a nIfkaL - -
\a ufkaL - -
\c Pronoun
\ge you(2P)

\r nIr
\a nIr - -
\a um - -
\c Pronoun
\ge you(2S.hon)

\r yAm
\a yAm - -
\a em - -
\c Pronoun
\ge I(1S.hon)

\r wAfkaL
\a wAfkaL - -
\a wafkaL - -
\c Pronoun
\ge you(2S.hon)

\r wAm
\a wAm - -
\a wam - -
\c Pronoun
\ge you(2S.hon)

\r wAM
\a wAM - -
\a waM - -
\c Pronoun
\ge you(2S.reflx)

\r nAm
\a nAm - -
\a nam - -
\c Pronoun
\ge we(1P.incl)

VERBS

Field	Root/Stem	Phonological Constraint(s)	Morphological Constraint(s)
\r	Aku		
\a	Aku	/_~[V]	+/~_[Pres.tns | Fut.tns]
\a	A	-	-
\a	Ak	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	become		
\r	AL		
\a	AL		
\a	AN		+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	rule		
\r	aZu		
\a	aZu	/_~[V]	-
\a	aZ	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	cry		
\r	cA		
\a	cA	/_~[V]	-
\a	ce	/_~[V]	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	die		
\r	cel		
\a	cel	-	-
\a	ceM	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	leave		
\r	cey		
\a	cey	-	-
\c	Verb		
\ge	do		
\r	col		
\a	col	-	-
\a	coM	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	say		
\r	eM		
\a	eM	-	-
\c	Verb		
\ge	think		
\r	ikaZ		
\a	ikaZ	-	-
\c	Verb		
\ge	disparage		

\r	iru		
\a	iru	/_~[V]	-
\c	Verb		
\ge	be		
\r	kAN		
\a	kAN	-	-
\a	kaN	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	see		
\r	kEL		
\a	kEL	-	+/~_[Pres.tns | Fut.tns]
\a	kEt	-	-
\c	Verb		
\ge	ask		
\r	koL		
\a	koL	-	-
\a	koN	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	hold		
\r	nil		
\a	nil	-	+/~_[Pres.tns | Fut.tns]
\a	niM	-	+/~_[Pres.tns | Fut.tns]
\a	niR	-	-
\c	Verb		
\ge	stand		
\r	nO		
\a	nO	/_~[V]	-
\a	no	/_~[V]	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	pain		
\r	pati		
\a	pati	/_~[V]	-
\c	Verb		
\ge	read/study		
\r	peRu		
\a	peRu	-	-
\a	peR	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	get		
\r	pO		
\a	pO	/_~[V]	-
\c	Verb	-	-
\ge	go		

\r	pOtu		
\a	pOtu	/_~[V]	-
\a	pOt	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	drop		
\r	pUN		
\a	pUN	-	+/~_[Pres.tns | Fut.tns]
\a	pUNu	/_~[V]	-
\c	Verb		
\ge	wear		
\r	uN		
\a	uN	-	-
\c	Verb		
\ge	eat		
\r	vA		
\a	vA	/_~[V]	+/~_[Pres.tns | Fut.tns]
\a	va	/_~[V]	+/~_[Pres.tns | Fut.tns]
\a	var	-	+/~_[Pres.tns | Fut.tns]
\a	varu	/_~[V]	-
\c	Verb		
\ge	come		
\r	viZu		
\a	viZu	/_~[V]	-
\a	viZ	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	fall		
\r	wUfku		
\a	wUfku	/_~[V]	-
\a	wUfk	-	+/~_[Pres.tns | Fut.tns]
\c	Verb		
\ge	sleep		

ADJECTIVES

Field	Root/Stem	Phonological Constraint(s)	Morphological Constraint(s)
\r	nalla		
\a	nalla	/_~[V]	-
\c	Adjective		
\ge	good		
\r	puwu		
\a	puwu	/_~[V]	-
\a	puw	-	-
\c	Adjective		
\ge	new		

The Suffix Lexicon

\id **tamsuff.dic** suffix dictionary

\s	Record marker
\a	Allomorph
\c	Category pair from/to
\mp	Morpheme property
\ge	English Gloss
\co	Comment
\noload	Do not load
\nocap	No caps change

Field	Suffix	Phonological Constraint(s)	Morphological Constraint(s)
\s	kaL		-
\a	kaL	/~[Vlg]_	-
\a	kkaL	-	-
\c	Noun/Noun Numeral/Numeral		
\ge	Plr.num		
\s	Y		
\a	Y	/[Casex1]~_	-
\a	RY	/[Casex2]~_	-
\a	yY	/[Casex3]~_	-
\a	NY	/[Casex4]~_	-
\a	rY	/[Casex5]~_	-
\a	wwY	/[Casex6]~_	-
\a	LY	/[Casex7]~_	-
\a	MY	/[Casex8]~_	-
\a	lY	/[Casex9]~_	-
\a	vY	/[Casex10]~_	-
\a	mY	/[Casex11]~_	-
\c	Noun/Noun Pronoun/Pronoun Numeral/Numeral		
\ge	Acc.cs		
\s	Otu		
\a	Otu	/[Casex1]~_	-
\a	ROtu	/[Casex2]~_	-
\a	yOtu	/[Casex3]~_	-
\a	NOtu	/[Casex4]~_	-
\a	rOtu	/[Casex5]~_	-
\a	wwOtu	/[Casex6]~_	-
\a	LOtu	/[Casex7]~_	-
\a	MOtu	/[Casex8]~_	-
\a	lOtu	/[Casex9]~_	-
\a	vOtu	/[Casex10]~_	-
\a	mOtu	/[Casex11]~_	-
\a	Ot	/_[V]	-
\c	Noun/Noun Pronoun/Pronoun Numeral/Numeral		
\ge	Soc1.cs		
\s	utaM		
\a	utaM	/[Casex1]~_	-
\a	RutaM	/[Casex2]~_	-

```
\a      yutaM                   /[Casex3]~_                     -
\a      NutaM                   /[Casex4]~_                     -
\a      tutaM                   /[Casex5]~_                     -
\a      wwutaM                  /[Casex6]~_                     -
\a      LutaM                   /[Casex7]~_                     -
\a      MutaM                   /[Casex8]~_                     -
\a      lutaM                   /[Casex9]~_                     -
\a      vutaM                   /[Casex10]~_                    -
\a      mutaM                   /[Casex11]~_                    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Soc2.cs

\s      Al
\a      Al                      /[Casex1]~_                     -
\a      RAl                     /[Casex2]~_                     -
\a      yAl                     /[Casex3]~_                     -
\a      NAl                     /[Casex4]~_                     -
\a      tAl                     /[Casex5]~_                     -
\a      wwAl                    /[Casex6]~_                     -
\a      LAl                     /[Casex7]~_                     -
\a      MAl                     /[Casex8]~_                     -
\a      lAl                     /[Casex9]~_                     -
\a      vAl                     /[Casex10]~_                    -
\a      mAl                     /[Casex11]~_                    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Instr.cs

\s      kku
\a      kku                     /[Casex1]~_                     -
\a      iRkAka                  /[Casex1]~_                     -
\a      RiRku                   /[Casex2]~_                     -
\a      yiRku                   /[Casex3]~_                     -
\a      NiRku                   /[Casex4]~_                     -
\a      tiRku                   /[Casex5]~_                     -
\a      wwiRku                  /[Casex6]~_                     -
\a      LiRku                   /[Casex7]~_                     -
\a      MiRku                   /[Casex8]~_                     -
\a      liRku                   /[Casex9]~_                     -
\a      viRku                   /[Casex10]~_                    -
\a      ukku                    /[Casex1]~_                     -
\a      Rukku                   /[Casex2]~_                     -
\a      Nukku                   /[Casex4]~_                     -
\a      tukku                   /[Casex5]~_                     -
\a      wwukku                  /[Casex6]~_                     -
\a      Lukku                   /[Casex7]~_                     -
\a      Mukku                   /[Casex8]~_                     -
\a      lukku                   /[Casex9]~_                     -
\a      makku                   /[Casex11]~_                    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Dat.cs

\s      utYya
\a      utYya                   /[Casex1]~_                     -
\a      RutYya                  /[Casex2]~_                     -
\a      yutYya                  /[Casex3]~_                     -
\a      NutYya                  /[Casex4]~_                     -
```

```
\a      tutYya          /[Casex5]~_     -
\a      wwutYya         /[Casex6]~_     -
\a      LutYya          /[Casex7]~_     -
\a      MutYya          /[Casex8]~_     -
\a      lutYya          /[Casex9]~_     -
\a      vutYya          /[Casex10]~_    -
\a      mutYya          /[Casex11]~_    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Gen1.cs

\s      iM
\a      iM              /[Casex1]~_     -
\a      RiM             /[Casex2]~_     -
\a      yiM             /[Casex3]~_     -
\a      NiM             /[Casex4]~_     -
\a      tiM             /[Casex5]~_     -
\a      wwiM            /[Casex6]~_     -
\a      LiM             /[Casex7]~_     -
\a      MiM             /[Casex8]~_     -
\a      liM             /[Casex9]~_     -
\a      viM             /[Casex10]~_    -
\a      miM             /[Casex11]~_    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Gen2.cs

\s      awu
\a      awu             /[Casex1]~_     -
\a      Rawu            /[Casex2]~_     -
\a      yawu            /[Casex3]~_     -
\a      Nawu            /[Casex4]~_     -
\a      tawu            /[Casex5]~_     -
\a      wwawu           /[Casex6]~_     -
\a      Lawu            /[Casex7]~_     -
\a      Mawu            /[Casex8]~_     -
\a      lawu            /[Casex9]~_     -
\a      vawu            /[Casex10]~_    -
\a      mawu            /[Casex11]~_    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Gen3.cs

\s      il
\a      il              /[Casex1]~_     -
\a      Ril             /[Casex2]~_     -
\a      yil             /[Casex3]~_     -
\a      Nil             /[Casex4]~_     -
\a      til             /[Casex5]~_     -
\a      wwil            /[Casex6]~_     -
\a      Lil             /[Casex7]~_     -
\a      Mil             /[Casex8]~_     -
\a      lil             /[Casex9]~_     -
\a      vil             /[Casex10]~_    -
\a      mil             /[Casex11]~_    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Loc1.cs
```

```
\s      itam
\a      itam                    /[Casex1]~_                     -
\a      Ritam                   /[Casex2]~_                     -
\a      yitam                   /[Casex3]~_                     -
\a      Nitam                   /[Casex4]~_                     -
\a      titam                   /[Casex5]~_                     -
\a      wwitam                  /[Casex6]~_                     -
\a      Litam                   /[Casex7]~_                     -
\a      Mitam                   /[Casex8]~_                     -
\a      litam                   /[Casex9]~_                     -
\a      vitam                   /[Casex10]~_                    -
\a      mitam                   /[Casex11]~_                    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Loc2.cs

\s      kkAka
\a      kkAka                   /[Casex1]~_                     -
\a      iRkAka                  /[Casex1]~_                     -
\a      RiRkAka                 /[Casex2]~_                     -
\a      yiRkAka                 /[Casex3]~_                     -
\a      NiRkAka                 /[Casex4]~_                     -
\a      tiRkAka                 /[Casex5]~_                     -
\a      wwiRkAka                /[Casex6]~_                     -
\a      LiRkAka                 /[Casex7]~_                     -
\a      MiRkAka                 /[Casex8]~_                     -
\a      liRkAka                 /[Casex9]~_                     -
\a      viRkAka                 /[Casex10]~_                    -
\a      ukkAka                  /[Casex1]~_                     -
\a      RukkAka                 /[Casex2]~_                     -
\a      NukkAka                 /[Casex4]~_                     -
\a      tukkAka                 /[Casex5]~_                     -
\a      wwukkAka                /[Casex6]~_                     -
\a      LukkAka                 /[Casex7]~_                     -
\a      MukkAka                 /[Casex8]~_                     -
\a      lukkAka                 /[Casex9]~_                     -
\a      makkAka                 /[Casex11]~_                    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Ben.cs

\s      ilirunwu
\a      ilirunwu                /[Casex1]~_                     -
\a      Rilirunwu               /[Casex2]~_                     -
\a      yilirunwu               /[Casex3]~_                     -
\a      Nilirunwu               /[Casex4]~_                     -
\a      tilirunwu               /[Casex5]~_                     -
\a      wwilirunwu              /[Casex6]~_                     -
\a      Lilirunwu               /[Casex7]~_                     -
\a      Milirunwu               /[Casex8]~_                     -
\a      lilirunwu               /[Casex9]~_                     -
\a      vilirunwu               /[Casex10]~_                    -
\a      milirunwu               /[Casex11]~_                    -
\c      Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge     Abl1.cs
```

```
\s      itamirunwu
\a      itamirunwu          /[Casex1]~_                 -
\a      Ritamirunwu         /[Casex2]~_                 -
\a      yitamirunwu         /[Casex3]~_                 -
\a      Nitamirunwu         /[Casex4]~_                 -
\a      titamirunwu         /[Casex5]~_                 -
\a      wwitamirunwu        /[Casex6]~_                 -
\a      Litamirunwu         /[Casex7]~_                 -
\a      Mitamirunwu         /[Casex8]~_                 -
\a      litamirunwu         /[Casex9]~_                 -
\a      vitamirunwu         /[Casex10]~_                -
\a      mitamirunwu         /[Casex11]~_                -
\c      Noun/Noun  Pronoun/Pronoun  Numeral/Numeral
\ge     Abl2.cs

\s      varY
\a      varY                -                           -
\c      Noun/Noun   Pronoun/Pronoun
\ge     Adv.Nom

\s      cuRRi
\a      cuRRi               -                           -
\a      ccuRRi              -                           -
\c      Noun/Noun  Pronoun/Pronoun  Numeral/Numeral
\ge     Adv.Acc

\s      kittE
\a      kittE               /[V]~_                      -
\a      kkittE              -                           -
\c      Noun/Noun  Pronoun/Pronoun  Numeral/Numeral
\ge     Adv.Obl

\s      itY
\a      itY                 -                           -
\c      Noun/Noun   Pronoun/Pronoun
\ge     Adv.Dat

\s      uL
\a      uL                  -                           -
\a      uLL                 /[V]~_                      -
\c      Noun/Noun   Pronoun/Pronoun
\ge     Adv.Dat

\s      veLi
\a      veLi                /_[G] /~_[V]                -
\c      Noun/Noun   Pronoun/Pronoun
\ge     Adv.Dat

\s      nEr
\a      nEr                 -                           -
\c      Noun/Noun   Pronoun/Pronoun
\ge     Adv.Dat

\s      piRaku                                          -
\a      piRaku              /[V]~_                      -
\a      ppiRaku             -                           -
```

\a piRak /[V]~_ /~_[C] -
\a ppiRak /~_[C] -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat

\s appAl
\a appAl - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat

\s appuram
\a appuram - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat

\s atuwwa
\a atuwwa - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat

\s ati
\a ati - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat

\s kurukk
\a kurukk /[V]~_ -
\a kkurukk - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Gen

\s mEl
\a mEl - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat/Gen

\s klZ
\a klZ /[V]~_ -
\a kklZ - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat/Gen

\s weRku
\a weRku /[V]~_ -
\a weRk /[V]~_ -
\a wweRku - -
\a wweRk - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat/Gen

\s mERku
\a mERku - -
\a mERk - -
\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat/Gen

\s	kiZakku		
\a	kiZakku	/[V]~_	-
\a	kiZakk	/[V]~_	-
\a	kkiZakku	-	-
\a	kkiZakk	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	vatakku		
\a	vatakku	-	-
\a	vatakk	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	pakkam		
\a	pakkam	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	mawwi		
\a	mawwi	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	natu		
\a	natu	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	aruk		
\a	aruk	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	ewir		
\a	ewir	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	muM		
\a	muM	-	-
\a	muMpu	-	-
\a	muMMAl	-	-
\a	mumwi	-	-
\c	Noun/Noun	Pronoun/Pronoun	
\ge	Adv.Dat/Gen		
\s	piM		
\a	piM	/[V]~_	-
\a	piMpu	/[V]~_	-
\a	piMMAl	/[V]~_	-
\a	pimwi	/[V]~_	-
\a	ppiM	-	-
\a	ppiMpu	-	-
\a	ppiMMAl	-	-
\a	ppimwi	-	-

\c Noun/Noun Pronoun/Pronoun
\ge Adv.Dat/Gen

\s mUlam
\a mUlam - -
\c Noun/Noun Pronoun/Pronoun
\ge Ppn.Gen

\s uriya
\a uriya - -
\c Noun/Noun Pronoun/Pronoun
\ge Ppn.Dat

\s Aka
\a Aka - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Dat

\s eMum
\a eMum - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom

\s eMRa
\a eMRa - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom

\s eMpawu
\a eMpawu - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom

\s eMappatuvawu
\a eMappatuvawu - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom

\s illA
\a illA - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom

\s eMRu
\a eMRu - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom/Dat

\s eMa
\a eMa - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Nom/Dat

\s kuriwwu
\a kuriwwu - -
\a kkuriwwu - -

\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Acc

\s wavirwwu
\a wwavirwwu - -
\a wwavirwwu - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Acc

\s kAttilum
\a kAttilum - Ppn.Acc +/Acc.cs_
\a kkAttilum /~[Vlg]_ Ppn.Acc +/Acc.cs_
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral
\ge Ppn.Acc
\mcc Ppn.Acc +/Acc.cs_

\s mattilum
\a mattilum - -
\c Noun/Noun
\ge Ppn.Acc

\s mAwiri
\a mAwiri - Pl.Nom +/~Obl.Qlf_
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective
\ge Pl.Nom
\mcc Pl.Nom +/~Obl.Qlf_

\s pOMRa
\a pOMRa /[V]~_ -
\a ppOMRa
\c Noun/Noun Pronoun/Pronoun
\ge Pl.Nom/Acc

\s pOla
\a pOla /[V]~_ -
\a ppOla
\c Noun/Noun Pronoun/Pronoun
\ge Pl.Nom/Acc

\s pOMRu
\a pOMRu /[V]~_ -
\a ppOMRu
\c Noun/Noun Pronoun/Pronoun
\ge Pl.Nom/Acc

\s pOl
\a pOl - -
\a ppOl - -
\c Noun/Noun Pronoun/Pronoun
\ge Pl.Acc

\s vita
\a vita - -
\c Noun/Noun Pronoun/Pronoun
\ge Pl.Acc

\s paRRi
\s paRRi
\a ppaRRi - -
\c Noun/Noun Pronoun/Pronoun
\ge Pl.Acc

\s vAkkil
\a vAkkil - -
\c Numeral/Numeral
\ge Adv.Obl

\s peyar
\a peyar - -
\c Numeral/Numeral
\a Pl.Nom

\s maNi
\a maNi - -
\c Numeral/Numeral
\ge Pl.Obl

\s watavY
\a watavY - -
\c Numeral/Numeral
\ge Pl.Obl

\s muRY
\a muRY - -
\c Numeral/Numeral
\ge Pl.Obl

\s kAl
\a kAl - -
\c Numeral/Numeral
\ge Pl.Obl

\s viwam
\a viwam - -
\c Numeral/Numeral
\ge Pl.Obl

\s vakY
\a vakY - -
\c Numeral/Numeral
\ge Pl.Obl

\s EkAl
\a EkAl - -
\c Numeral/Numeral
\ge Pl.Qnt

\s arY
\a arY - -
\c Numeral/Numeral
\ge Pl.Qnt

\s arYkkAl
\a arYkkAl - -
\c Numeral/Numeral
\ge Pl.Qnt

\s EmukkAl
\a EmukkAl - -
\c Numeral/Numeral
\ge Pl.Qnt

\s muwal
\a muwal - -
\c Numeral/Numeral
\ge Adv.tmp

\s vaM
\a vaM - -
\c Numeral/Numeral
\ge 3SM.num.gnp

\s var
\a var - -
\c Numeral/Numeral
\ge 3Shon.num.gnp

\s wwi
\a wwi - -
\c Numeral/Numeral
\ge 3Sfnum.gnp

\s kiR
\a kiR /[Presx1]~_ -
\a kiMR /[Presx1]~_ -
\a kkiR /[Presx2]~_ -
\c Verb/Verb
\ge Pres.tns

\s M
\a M /[Pastx1]~_ -
\c Verb/Verb
\ge Past.tns

\s t
\a t /[Pastx2]~_ -
\c Verb/Verb
\ge Past.tns

\s w
\a w /[Pastx3]~_ -
\c Verb/Verb
\ge Past.tns

\s ww
\a ww /[Pastx4]~_ -
\c Verb/Verb
\ge Past.tns

```
\s      R
\a      R                   /[Pastx5]~_             -
\c      Verb/Verb
\ge     Past.tns

\s      nw
\a      nw                  /[Pastx6]~_             -
\c      Verb/Verb
\ge     Past.tns


\s      iM
\a      iM                  /[Pastx7]~_             -
\c      Verb/Verb
\ge     Past.tns

\s      p
\a      p                   /[Futx1]~_              -
\c      Verb/Verb
\ge     Fut.tns

\s      pp
\a      pp                  /[Futx2]~_              -
\c      Verb/Verb
\ge     Fut.tns

\s      v
\a      v                   /[Futx3]~_              -
\c      Verb/Verb
\ge     Fut.tns

\s      avillY
\a      avillY              /[Nfinx1]~_             -
\a      lavillY             /[Nfinx2]~_             -
\a      kavillY             /[Nfinx3]~_             -
\a      yavillY             /[Nfinx4]~_             -
\a      kkavillY            /[Nfinx5]~_             -
\a      LavillY             /[Nfinx6]~_             -
\a      NavillY             /[Nfinx7]~_             -
\c      Verb/Verb
\ge     Neg.Past

\s      amAtt
\a      amAtt               /[Nfinx1]~_             -
\a      lamAtt              /[Nfinx2]~_             -
\a      kamAtt              /[Nfinx3]~_             -
\a      yamAtt              /[Nfinx4]~_             -
\a      kkamAtt             /[Nfinx5]~_             -
\a      LamAtt              /[Nfinx6]~_             -
\a      NamAtt              /[Nfinx7]~_             -
\c      Verb/Verb
\ge     Neg.Fut

\s      alAm
\a      alAm                /[Nfinx1]~_             -
\a      kalAm               /[Nfinx2]~_             -
```

\a	lalAm	/[Nfinx3]~_	-
\a	kkalAm	/[Nfinx4]~_	-
\a	yalAm	/[Nfinx5]~_	-
\a	LalAm	/[Nfinx6]~_	-
\a	NalAm	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Hort.		
\s	a		
\a	a	/[Nfinx1]~_	-
\a	ka	/[Nfinx2]~_	-
\a	la	/[Nfinx3]~_	-
\a	kka	/[Nfinx4]~_	-
\a	ya	/[Nfinx5]~_	-
\a	La	/[Nfinx6]~_	-
\a	Na	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Adm.		
\s	Aw		
\a	Aw	/[Nfinx1]~_	-
\a	kAw	/[Nfinx2]~_	-
\a	lAw	/[Nfinx3]~_	-
\a	kkAw	/[Nfinx4]~_	-
\a	yAw	/[Nfinx5]~_	-
\a	LAw	/[Nfinx6]~_	-
\a	NAw	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Proh.		
\s	a		
\a	a	/[Nfinx1]~_	-
\a	ka	/[Nfinx2]~_	-
\a	la	/[Nfinx3]~_	-
\a	kka	/[Nfinx4]~_	-
\a	ya	/[Nfinx5]~_	-
\a	La	/[Nfinx6]~_	-
\a	Na	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Inf.		
\s	kiRa		
\a	kiRa	/[Presx1]~_	-
\a	kiMRa	/[Presx1]~_	-
\a	kkiRa	/[Presx2]~_	-
\c	Verb/Verb		
\ge	Pres.Adj.Ppl		
\s	Ma		
\a	Ma	/[Pastx1]~_	-
\a	ta	/[Pastx2]~_	-
\a	wa	/[Pastx3]~_	-
\a	wwa	/[Pastx4]~_	-
\a	Ra	/[Pastx5]~_	-
\a	nwa	/[Pastx6]~_	-
\a	iMa	/[Pastx7]~_	-

\c	Verb/Verb		
\ge	Past.Adj.Ppl		
\s	um		
\a	um	/[Nfinx1]~_	-
\a	kum	/[Nfinx2]~_	-
\a	lum	/[Nfinx3]~_	-
\a	kkum	/[Nfinx4]~_	-
\a	yum	/[Nfinx5]~_	-
\a	Lum	/[Nfinx6]~_	-
\a	Num	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Habitual.Ppl		
\s	Awa		
\a	Awa	/[Nfinx1]~_	-
\a	kAwa	/[Nfinx2]~_	-
\a	lAwa	/[Nfinx3]~_	-
\a	kkAwa	/[Nfinx4]~_	-
\a	yAwa	/[Nfinx5]~_	-
\a	LAwa	/[Nfinx6]~_	-
\a	NAwa	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Neg.Adj.Ppl		
\s	li		
\a	li	/[PosVbPplx1]~_	-
\a	tu	/[PosVbPplx2]~_	-
\a	wu	/[PosVbPplx3]~_	-
\a	wwu	/[PosVbPplx4]~_	-
\a	Ru	/[PosVbPplx5]~_	-
\a	nwu	/[PosVbPplx6]~_	-
\a	ı	/[PosVbPplx7]~_	-
\c	Verb/Verb		
\ge	Pos.Vbl.Ppl		
\s	Amal		
\a	Amal	/[Nfinx1]~_	-
\a	kAmal	/[Nfinx2]~_	-
\a	lAmal	/[Nfinx3]~_	-
\a	kkAmal	/[Nfinx4]~_	-
\a	yAmal	/[Nfinx5]~_	-
\a	LAmal	/[Nfinx6]~_	-
\a	NAmal	/[Nfinx7]~_	-
\a	Awu	/[Nfinx1]~_	-
\a	kAwu	/[Nfinx2]~_	-
\a	lAwu	/[Nfinx3]~_	-
\a	kkAwu	/[Nfinx4]~_	-
\a	yAwu	/[Nfinx5]~_	-
\a	LAwu	/[Nfinx6]~_	-
\a	NAwu	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Neg.Vbl.Ppl		

\s	MAl		
\a	MAl	/[Pastx1]~_	-
\a	tAl	/[Pastx2]~_	-
\a	wAl	/[Pastx3]~_	-
\a	wwAl	/[Pastx4]~_	-
\a	RAl	/[Pastx5]~_	-
\a	nwAl	/[Pastx6]~_	-
\a	iMAl	/[Pastx7]~_	-
\c	Verb/Verb		
\ge	Pos.Cndl		
\s	AvittAl		
\a	AvittAl	/[Nfinx1]~_	-
\a	kAvittAl	/[Nfinx2]~_	-
\a	lAvittAl	/[Nfinx3]~_	-
\a	kkAvittAl	/[Nfinx4]~_	-
\a	yAvittAl	/[Nfinx5]~_	-
\a	LAvittAl	/[Nfinx6]~_	-
\a	NAvittAl	/[Nfinx7]~_	-
\c	Verb/Verb		
\ge	Neg.Cndl		
\s	likkoNtiru		
\a	likkoNtiru	/[PosVbPplx1]~_	-
\a	tukkoNtiru	/[PosVbPplx2]~_	-
\a	wukkoNtiru	/[PosVbPplx3]~_	-
\a	wwukkoNtiru	/[PosVbPplx4]~_	-
\a	RukkoNtiru	/[PosVbPplx5]~_	-
\a	nwukkoNtiru	/[PosVbPplx6]~_	-
\a	ikkoNtiru	/[PosVbPplx7]~_	-
\c	Verb/Verb		
\ge	Dur.Cndl		
\s	pO		
\a	pO	-	-
\c	Verb/Verb		
\ge	Aux.Vb1		
\s	vENtAm		
\a	vENtAm	-	-
\c	Verb/Verb		
\ge	Aux.Vb1		
\s	vENtum		
\a	vENtum	-	-
\c	Verb/Verb		
\ge	Aux.Vb1		
\s	col		
\a	col	-	-
\c	Verb/Verb		
\ge	Aux.Vb1		

\s vY
\a vY - -
\c Verb/Verb
\ge Aux.Vb1

\s vitu
\a vitu - -
\c Verb/Verb
\ge Aux.Vb1

\s pOtu
\a pOtu - -
\c Verb/Verb
\ge Aux.Vb1

\s kotu
\a kotu - -
\c Verb/Verb
\ge Aux.Vb1

\s mutiyum
\a mutiyum - -
\c Verb/Verb
\ge Aux.Vb1

\s mutiyAwu
\a mutiyAwu - -
\c Verb/Verb
\ge Aux.Vb1

\s koL
\a koL - -
\c Verb/Verb
\ge Aux.Vb2

\s muti
\a muti - -
\c Verb/Verb
\ge Aux.Vb2

\s wIr
\a wIr - -
\c Verb/Verb
\ge Aux.Vb2

\s waLLu
\a waLLu - -
\c Verb/Verb
\ge Aux.Vb2

\s vY
\a vY - -
\c Verb/Verb
\ge Aux.Vb2

\s AyiRRu

\a	AyiRRu	-	-
\c	Verb/Verb		
\ge	Aux.Vb2		
\s	wolY		
\a	wolY	-	-
\c	Verb/Verb		
\ge	Aux.Vb2		
\s	EM		
\a	EM	-	-
\c	Verb/Verb		
\ge	1S.pe		
\s	Om		
\a	Om	-	-
\c	Verb/Verb		
\ge	1P.incl.pe		
\s	Ay		
\a	Ay	-	-
\a	E	-	-
\c	Verb/Verb		
\ge	2S.pe		
\s	Ir		
\a	Ir	-	-
\c	EL	-	-
\ge	Verb/Verb		
	2S.hon.pe		
\s	IrkaL		
\a	IrkaL	-	-
\c	Verb/Verb		
\ge	2S.hon/2P.pe		

\s AM
\a AM - -
\c Verb/Verb
\ge 3SM.pe

\s AL
\a AL - -
\c Verb/Verb
\ge 3SF.pe

\s um
\a um - -
\c Verb/Verb
\ge 3SN.pe

\s E
\a E - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Emph1.Cl

\s O
\a O - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Intrg2.Cl

\s um
\a um /[V]~_ -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Incl1.Cl

\s wAM
\a wAM /[Vd]~_ -
\a wwAM - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Emph2.Cl

\s Avawu
\a Avawu /[V]~_ /[Vbk]v_ /[Vft]y_ -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Cntg.Cl

\s kUta
\a kUta /[Vlg]~_ -
\a kkUta - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Incl2.Cl

\s mattum
\a mattum - -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Restr.Cl

\s Am
\a Am - -
\a vAm - -
\a yAm - -

\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Supp.Cl

\s A
\a A /[V]~_ /[Vbk]v_ /[Vft]y_ -
\c Noun/Noun Pronoun/Pronoun Numeral/Numeral Adjective/Adjective Verb/Verb
\ge Intrg1.Cl

\s tA
\a tA - -
\a atA - -
\c Verb/Verb
\ge 3SM.Voc.Cl.Cl

\s tI
\a tI - -
\a AtI - -
\c Verb/Verb
\ge 3SF.Voc.Cl

\s tEy
\a tEy - -
\a atEy - -
\c Verb/Verb
\ge 3SM.colloq.Voc.Cl

\s yyA
\a yyA - -
\a ayyA - -
\c Verb/Verb
\ge 3SM.hon.Voc.Cl

\s mA
\a mA - -
\a ammA - -
\c Verb/Verb
\ge 3SF.hon.Voc.Cl

\s pA
\a pA - -
\a appA - -
\c Verb/Verb
\ge 3SM.hon.Voc.Cl

\s afka
\a afka - -
\a ufka - -
\a fka - -
\c Verb/Verb
\ge 3S.hon/P.Voc.Cl

\s iya
\a iya -
\c Adjective/Adjective
\ge bd.Qlf
\mcc bd.Qlf +/good~_

\s vaM
\a vaM - -
\c Adjective/Adjective
\ge 3SM.pe

\s vaL
\a vaL - -
\c Adjective/Adjective
\ge 3SF.pe

\s var
\a var - -
\c Adjective/Adjective
\ge 3S.hon.pe

\s wu
\a wu - -
\c Adjective/Adjective
\ge 3SN.pe

Appendix **III**
Database for the KIMMO Analyzer in Tamil (KIMMO Version- ,2.1.0)

The KIMMO Rule File

TAMIL.RUL
; Rules file for the Tamil description.
; To load this file, enter the command **LOAD RULES TAMIL**

; This description of Tamil is based on the article "A two-level morphological analysis of English," by Lauri Karttunen and K. Wittenburg, Texas Linguistic Forum 22:217-228 (1983).

; + = Morpheme break

ALPHABET
a A i I u U e E Y o O W k c t w p R F f N n m M y r L v Z l +

NULL 0
ANY @
BOUNDARY #
SUBSETV a A i I u U e E Y o O W; vowels
SUBSET Co k c t w p R; obstruents
SUBSET Cf t p R; front consonants
SUBSET Cn F f N n m M; nasals
SUBSET Cs y r L v Z l; sonorants (non-nasal)
SUBSET Cc y L l; continuants
SUBSET Vlg A U I E O; long vowels
SUBSET Vsh a i u e o; short vowels
SUBSET Vft Y i I y; front vowels
SUBSET Vbk U; back high vowels
SUBSET Vbl A O; **back** long vowels

RULE "1 Consonant defaults" 1 19

	k	c	t	w	p	R	F	f	N	N	m	M	y	r	L	v	Z	l	@	
	k	c	t	w	p	R	F	f	N	N	m	M	y	r	L	v	Z	l	@	Surface
	k	c	t	w	p	R	F	f	N	N	m	M	y	r	L	v	Z	l	@	Underlying
1:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

RULE "2 Vowels and other defaults" 1 13

	a	A	i	I	u	U	E	E	Y	o	O	W	@	
	a	A	i	I	u	U	E	E	Y	o	O	W	@	Surface
	a	A	i	I	u	U	E	E	Y	o	O	W	@	Underlying
1:	1	1	1	1	1	1	1	1	1	1	1	1		

RULE "3 Gemination1, 0:{k,l,y,L,N,M} ⇒ {Vbl,l,y,L,N,M} (+:0)___" 7 14

	Vbl	l	y	L	N	M	+	0	0	0	0	0	@	Surface
	Vbl	l	y	L	N	M	0	k	l	y	L	N	@	Underlying
1:	2	3	4	5	6	7	1	0	0	0	0	0	1	
2:	2	3	4	5	6	7	2	1	0	0	0	0	1	
3:	0	3	4	5	6	7	3	0	1	0	0	0	1	
4:	2	0	4	5	6	7	4	0	0	1	0	0	1	
5:	2	3	0	5	6	7	5	0	0	0	1	0	1	
6:	2	3	4	0	6	7	6	0	0	0	0	1	1	
7:	2	3	4	5	0	7	7	0	0	0	0	1	1	

RULE "4 Apocope, u:0 ⇒ ___(+:0) V" 3 4

	u	+	V	@	Surface
	0	0	V	@	Underlying
1:	2	1	1	1	
2.	0	3	0	0	
3:	0	0	1	0	

RULE "5 Nasal Assimilation, m:f ⇒ ___(+:0) k" 3 4

	m	+	k	@	Surface
	f	0	k	@	Underlying
1:	2	1	1	1	
2.	0	3	0	0	
3.	0	0	1	0	

RULE "6 Oblique, 0:w ⇒ m:w (+:0)___" 3 4

	m	+	0	@	Surface
	w	0	w	@	Underlying
1:	2	1	1	1	
2.	0	3	0	0	
3.	0	0	1	0	

RULE "7 Plural Gemination, 0:k ⇒ Vlg (+:0)___k" 4 5

	Vlg	+	0	k	@	Surface
	Vlg	0	k	k	@	Underlying
1:	2	1	1	1	1	
2.	0	3	0	0	0	
3.	0	0	4	0	0	

RULE "8 Glide Insertion, 0:{v,y} ⇒ {Vbk,Vft} (+:0)___V" 4 6

	Vbk	Vft	+	0	0	@	Surface
	Vbk	Vft	0	v	y	@	Underlying
1:	2	3	1	0	0	1	
2:	0	3	2	1	0	1	
3:	0	0	3	0	1	1	
4:	2	0	4	0	0	1	

RULE "9 Assimilation, {M,l,l,L}:{r,R,M,t} ⇒ ___(+:0) k" 6 7

	M	l	l	L	+	k	@	Surface
	r	R	M	t	0	k	@	Underlying
1:	2	3	4	5	0	1	1	
2.	0	0	0	0	6	0	0	
3.	0	0	0	0	6	0	0	
4.	0	0	0	0	6	0	0	
5.	0	0	0	0	6	0	0	
6:	0	0	0	0	6	1	0	

RULE "10 Vowel Shortening1, A:a ⇒ ___Cn Co" 3 4

	A	Cn	Co	@	Surface
	a	Cn	Co	@	Underlying
1:	2	1	1	1	
2.	0	3	0	0	
3.	0	0	1	0	

RULE "11 Vowel Shortening2, A:e ⇒ (+:0)___w" 3 4

	+	A	w	@	Surface
	0	e	w	@	Underlying
1:	2	1	1	1	
2.	0	3	0	0	
3.	0	0	1	0	

RULE "12 Stop Gemination, 0:{k,p} ⇒ ___(+:0) {k,p}" 3 6

	0	0	k	p	+	@	Surface
	k	p	k	p	0	@	Underlying
1:	2	3	1	1	1	1	
2.	0	0	1	0	2	0	
3.	0	0	0	1	3	0	

RULE "13 Gemination2, {l,L,l,L}:{M,N,M,t} ⇒ ___(+:0) {R,t,M,t} V" 6 9

	l	L	L	+	R	t	M	V	@	Surface
	M	N	t	0	R	t	M	V	@	Underlying
1:	2	3	4	0	1	1	1	1	1	
2.	0	0	0	5	0	0	0	0	0	
3.	0	0	0	5	0	0	0	0	0	
4.	0	0	0	5	0	0	0	0	0	
5.	0	0	0	0	6	6	6	0	0	
6:	0	0	0	0	0	0	0	1	0	

END

The KIMMO Lexicon Files

I. Main Lexicon

;TAMIL.LEX
; Lexicon file for the Tamil description.
; To load this file, enter the command **LOAD LEXICON TAMIL**

ALTERNATION Begin NOUN_ROOT VERB_ROOT ADJECTIVE_ROOT NUMERAL_ROOT PRONOUN_ROOT End
ALTERNATION Noun_Root NUMBER CASE End
ALTERNATION Verb_Root TENSE End
ALTERNATION Tense GNP VERB_INFLECTIONS TENSE End
ALTERNATION GNP VERB_INFLECTIONS TENSE COMMON_INFLECTIONS End
ALTERNATION Auxiliary Verb VERBJNFLECTIONS COMMON_INFLECTIONS End
ALTERNATION Verb_Inflections VERB_INFLECTIONS COMMON_INFLECTIONS End
ALTERNATION Numeral_Root NUMERAL_INFLECTIONS End
ALTERNATION Pronoun_Root CASE COMMON_INFLECTIONS End
ALTERNATION Adjective_Root ADJECTIVE_INFLECTIONS GNP End
ALTERNATION Number CASE NOUN_INFLECTIONS COMMON_INFLECTIONS End
ALTERNATION Case NOUN_INFLECTIONS COMMON_INFLECTIONS End
ALTERNATION Particle NOUN_INFLECTIONS VERB_INFLECTIONS COMMONJNFLECTIONS End
ALTERNATION GNPbase ADJECTIVE_INFLECTIONS GNP COMMON_INFLECTIONS End
ALTERNATION Postposition NOUN_INFLECTIONS COMMON_INFLECTIONS End
ALTERNATION Adverbial NOUNJNFLECTIONS COMMON_INFLECTIONS End
ALTERNATION Clitic COMMON_INFLECTIONS End

FEATURES Nom Sg.Nom Pl.Nom Pl.Acc Pl.Gen Ppn.Nom Ppn.Gen Ppn.Acc Ppn.Dat Ppn.Nom/Dat Adv.Obl Adv.Dat Adv.Gen Adv.Gen/Dat Cl Sg Plur Case.Acc Case.Dat Case.Gen Case.Ben Case.Abl Case.Loc Case.Instr Case.Soc Adj.Free GNPbase Past Pres Fut GNP Aux.Vb VerbRoot Vb.Pl

FIELDCODE lf U
FIELDCODE lx L
FIELDCODE alt A
FIELDCODE fea F
FIELDCODE gl G

INCLUDE tamil.sfm
INCLUDE verb_root.lex
INCLUDE noun_root.lex
INCLUDE pronoun_root.lex
INCLUDE numeral_root.lex
INCLUDE adjective_root.lex
INCLUDE number.lex
INCLUDE case.lex
INCLUDE tense.lex
INCLUDE noun_inflections.lex
INCLUDE numeral_inflections.lex
INCLUDE verb_inflections.lex
INCLUDE adjective_inflections.lex
INCLUDE *fftpUx*
INCLUDE common_inflections.lex

END

II. Root Lexicons

NOUNS

; NOUN_ROOT.LEX
; INCLUDE file for TAMIL.LEX

\lf AN
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(AN)

\lf ARu
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(Aru)

\lf eli
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(eli)

\lf ilY
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(ilY)

\lf iwaZ
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(iwaZ)

\lf I
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(I)

\lf kaN
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(kaN)

\lf kAl
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(kAl)

\lf kAtu
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(kAtu)

\lf maMrwaM
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(maMrwaM)

\lf maram
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl N(maram)

\lf muL
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(muL)

\lf mAM
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(mAM)

\lf narampu
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(narampu)

\lf nAy
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(nAy)

\lf poM
\lx NOUN_ROOT
\alt Noun_Root
\fea Nom
\gl Noun(poM)

\lf poy
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(poy)

\lf pul
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(pul)

\lf poruL
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(poruL)

\lf pU
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(pU)

\lf vaNtu
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(vaNtu)

\lf wEr
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(wEr)

\lf wOL
\lx NOUN_ROOT
\alt Noun_Root
\fea Sg.Nom
\gl Noun(wOL)

PRONOUNS

; PRONOUN_ROOT.LEX
; INCLUDE *Be* for TAMIL.LEX

\lf avaL
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(avaL)

\lf avaM
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(avaM)

\lf avar
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(avar)

\lf awu
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(awu)

\lf avE
\k PRONOUN_ROOT
\alt PronounRoot
\fea Nom
\gl Pronoun(awu)

\lf nAM
\lx PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(nAM)

\lf nAfkaL
\lx PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(nAfkaL)

\lf nI
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(nI)

\lf nIfkaL
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(nIfkaL)

\lf nIr
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(nIr)

\lf yAm
\lx PRONOUN_ROOT
\alt Ptonoun_Root
\fea Nom
\gl Pronoun(yAm)

\lf wAfkaL
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(wAfkaL)

\lf wAm
\k PRONOUN_ROOT
\alt PronounRoot
\£ea Nom
\gl Pronoun(wAm)

\lf wAM
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(wAM)

\lf nAm
\k PRONOUN_ROOT
\alt Pronoun_Root
\fea Nom
\gl Pronoun(nAm)

ADJECTIVES

; ADJECTIVE_ROOT.LEX
; INCLUDE ffle for TAMIL.LEX

\lf nalla
\k ADJECTIVE_ROOT
\alt Adjective_Root
\foa Adj.Free
\gl Adjective(nalla)

\lf puwu
\lx ADJECTIVE_ROOT
\alt Adjective_Root
\fea Adj.Free
\gl Adjective(puwu)

NUMERALS

; NUMERAL_ROOT.LEX
; INCLUDE file for TAMIL.LEX

\lf oMRu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Norn
\gl Numeral(oMRu)

\lf iraNtu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gi Numeral(iraNtu)

\lf mUMRu
\lx NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(mUMRu)

\lf nAMku
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(nAMku)

\lf Ynwu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(YMwu)

\lf ARu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(ARu)

\lf EZu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(EZu)

\lf ettu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(ettu)

\lf oMpawu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(oMpawu)

\lf pawwu
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(pawwu)

\lf nURu
\lx NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(MURu)

\lf Ayiram
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(Ayiram)

\lf latcam
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(latcam)

\lf kOti
\k NUMERAL_ROOT
\alt Numeral_Root
\fea Nom
\gl Numeral(kOti)

2. VERBS

; VERB_INFLECTIONS.LEX
; INCLUDE file for TAMIL.LEX

\lf Aku
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(Aku)

\lf AL
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(AL)

\lf aZu
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(aZu)

\lf cA
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(cA)

\lf cel
\lx VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(cel)

\lf cey
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(cey)

\lf col
\lx VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(col)

\lf eM
\lx VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(eM)

\lf ikaZ
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(ikaZ)

\lf iru
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(iru)

\lf kAN
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(kAN)

\lf kEL
\lx VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(kEL)

\lf koL
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(koL)

\lf nata
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(nata)

\lf nil
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(nil)

\lf nO
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(no)

\lf pan
\k VERB_ROOT
\alt Verb_Root
\fea *Vb*
\gl Verb(pati)

\lf peRu
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(peRu)

\lf pO
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(pO)

\lf pOtu
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(pOtu)

\lf pUN
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(pUN)

\lf UN
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(UN)

\lf vA
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(vA)

\lf viZu
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(viZu)

\lf wUfku
\k VERB_ROOT
\alt Verb_Root
\fea Vb
\gl Verb(wUfku)

III. Suffix Lexicons

Number Inflection Lexicon

```
;NUMBERXEX
; INCLUDE file for TAMIL.LEX

\lf     0
\lx     NUMBER
\alt    Number
\fea    Sg
\gl     SG

\lf     kaL
\lx     NUMBER
\alt    Number
\fea    Pl

\gl     PL
```

Case Inflection Lexicon

```
; CASE.LEX
; INCLUDE file for TAMIL.LEX
\lf     Y
\lx     CASE
\alt    Case
\fea    CaseAcc
\gl     ACC

\lf     kku
\k      CASE
\alt    Case
\fea    Case.Dat
\gl     DAT

\lf     utYya
\lx     CASE
\alt    Case
\fea    Case.Gen
\gl     GEN

\lf     Otu
\lx     CASE
\alt    Case
\fea    Case.Soc
\gl     SOC

\lf     Al
\k      CASE
\alt    Case
\fea    Case.Instr
\gl     INS

\lf     utaM
\lx     CASE
\alt    Case
\fea    Case.Soc
\gl     SOC

\lf     il
\k      CASE
\alt    Case
\fea    CaseXoc
\gl     LOC

\lf     itam
\k      CASE
\alt    Case
\fea    CaseXoc
\gl     LOC

\lf     ilirunwu
\k      CASE
\alt    Case
\fea    Case.Abl
\gl     ABL

\lf     itamirunwu
\k      CASE
\alt    Case
\fea    Case.Abl
\gl     ABL

\\{     kkAka
\k      CASE
\alt    Case
\fea    Case.Ben
\gl     BEN
```

Nominal/Pronominal Inflection Lexicon

```
; NOUN_INFLECTION.LEX
; INCLUDE file for TAMIL.LEX

\lf   mAwiri
\k    NOUN_INFLECTIONS
\alt  Particle
\fea  Pl.Nom
\gl   Pl.Nom

\lf   wavira
\lx   NOUN_INFLECTIONS
\alt  Particle
\fea  Pl .Acc
\gl   PLAcc

\lf   pOl
\lx   NOUN_INFLECTIONS
\alt  Particle
\fea  Pl.Nom
\gl   Pl.Nom

\lf   pOla
\k    NOUN_INFLECTIONS
\alt  Particle
\fea  Pl.Nom/Acc
\gl   Pl.Nom/Acc

\lf   pOMru
\k    NOUN_INFLECTIONS
\alt  Particle
\fea  Pl.Nom/Acc
\gl   Pl.Nom/Acc

\lf   pOMra
\lx   NOUN_INFLECTIONS
\alt  Particle
\fea  PLNom/Acc
\gl   Pl.Nom/Acc

\lf   paRRi
\lx   NOUN_INFLECTIONS
\alt  Particle
\fea  Pl.Acc
\gl   PLAcc

\lf   pati
\lx   NOUN_INFLECTIONS
\alt  Particle
\fea  Pl.Gen
\gl   Pl.Gen

\lf   mUlam
\lx   NOUNJNFLECnONS
\alt  Postposition
\fea  Ppn.Gen
\gl   Ppn.Gen

\lf   varY
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Acc
\gl   Ppn.Acc

\lf   uriya
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Dat
\gl   Ppn.Dat

\lf   Aka
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Dat
\gl   Ppn.Dat

\lf   eMum
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom
\gl   Ppn.Nom

\lf   eMRa
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom
\gl   Ppn.Nom

\lf   eMpawu
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom
\gl   Ppn.Nom

\lf   eMappatuvawu
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom
\gl   Ppn.Nom

\lf   illA
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom
\gl   Ppn.Nom

\lf   eMRu
\lx   NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom/Dat
\gl   Ppn.Nom/Dat

\lf   eMa
\k    NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Nom/Dat
\gl   Ppn.Nom/Dat

\lf   cuRRi
\k    NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Acc
\gl   Ppn.Acc

\lf   kuriwwu
\k    NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Acc
\gl   Ppn.Acc

\lf   waviriwwu
\k    NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Acc
\gl   Ppn.Acc

\lf   kAttilum
\k    NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Acc
\gl   Ppn.Acc

\lf   mattilum
\k    NOUN_INFLECTIONS
\alt  Postposition
\fea  Ppn.Acc
\gl   Ppn-Acc
```

\lf kittE
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Obl
\gl Adv.Obl

\lf itY
\lx NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gi Adv.Dat

\lf uL
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf veLi
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf nEr
\lx NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf piRaku
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf appAl
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lt appuram
\lx NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf atuwwa
\lx NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf ati
\lx NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Dat
\gl Adv.Dat

\lf kurukk
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf mEl
\lx NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf kIZ
\k NOIJNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf weRku
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf mERku
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf kiZakku
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf vatakku
\k NOUN_INFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf pakkam
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen
\gl Adv.Gen

\lf mawwi
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen/Dat
\gl Adv.Gen/Dat

\lf natu
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen/Dat
\gl Adv.Gen/Dat

\lf aruk
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen/Dat
\gl Adv.Gen/Dat

\lf ewir
\lx NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen/Dat
\gl Adv.Gen/Dat

\lf muM
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen/Dat
\gl Adv.Gen/Dat

\lf piM
\k NOUNJNFLECTIONS
\alt Adverbial
\fea Adv.Gen/Dat
\gl Adv.Gen/Dat

Numeral Inflection Lexicon

```
; NUMERAL_INFLECTION.LEX
; INCLUDE file for TAMIL.LEX

\lf   vAkkil
\lx   NUMERAL_INFLECTIONS
\alt  Particle
\fea  Pl
\gl   Adv.Obl

\lf   peyar
\lx   NUMERAL_INFLECTIONS
\alt  Particle
\fea  Pl
\gl   Pl.Nom

\lf   maNi
\lx   NUMERAL_INFLECTIONS
\alt  Partide
\fea  Pl
\gl   Pl.Obl

\lf   watavY
\lx   NUMERAL_INFLECTIONS
\alt  Partide
\fea  Pl
\gl   Pl.Obl

\lf   muRY
\k    NUMERAL_INFLECTIONS
\alt  Parade
\fea  Pl
\gi   PLOW

\lf   kAl
\lx   NUMERAL_INFLECTIONS
\alt  Partide
\fea  Pl
\gl   Pl.Obl

\lf   viwam
\lx   NUMERAL_INFLECTIONS
\alt  Partide
\fea  Pl
\gl   Pl.Obl

\lf   vakY
\lx   NUMERALJNFLECTIONS
\alt  Partide
\fea  Pl
\gl   Pl.Obl

\lf   EkAl
\lx   NUMERAL_INFLECTIONS
\alt  Partide
\fea  Pl
\gl   Pl.Qnt

\lf   arY
\lx   NUMERAL_INFLECTIONS
\alt  Partide
\fea  Pl
\gl   PLQnt

\lf   arYkkAl
\lx   NUMERALJNFLECnONS
\alt  Partide
\fea  Pl
\gl   Pl.Qnt

\lf   EmukkAl
\lx   NUMERAL_INFLECTIONS
\alt  Particle
\fea  Pl
\gl   PLQnt

\lf   muwal
\lx   NUMERAL_INFLECTIONS
\alt  Adverbial
\fea  Pl
\gl   Adv.tmp

\lf   vaM
\lx   NUMERAL_INFLECTIONS
\alt  GNP
\fea  Pl
\gl   3SM.num.gnp

\lf   var
\lx   NUMERAL_INFLECTIONS
\alt  GNP
\fea  Pl
\gl   3Shon.num.gnp

\lf   wwi
\lx   NUMERAL_INFLECTIONS
\alt  GNP
\fea  Pl
\gl   3Sfnum.gnp
```

Verb Inflection Lexicon

; VERB_INFLECTION.LEX
; INCLUDE file for TAMIL.LEX

\lf pO
\lx VERB_INFLECTIONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf wolY
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf pAr
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf col
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf vY
\lx VERBJNFLECTIONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf vitu
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf mutiyum
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf mutiyAwu
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf tnuti
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf kUtAwu
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf illE
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf veNtum
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf veNtAm
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf avaciyam illE
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf waLLu
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf koL
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf wIr
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf kotu
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf AyiRRu
\lx VERBJNFLECnONS
\alt Auxiliary Verb
\fea Vb.Infln
\gl Aux.Vb

\lf EM
\lx VERBJNFLECnONS
\alt GNP
\fea Vb.Infln
\gl 1S.pe

\lf Om
\lx VERBJNFLECnONS
\alt GNP
\fea Vb.Infln
\gl 1P.ind.pe

\lf Ay
\lx VERBJNFLECnONS
\alt GNP
\fea Vb.Infln
\gl 2S.pe

\lf Ir
\lx VERBJNFLECnONS
\alt GNP
\fea Vb.Infln
\gl 2S.hon.pe

\lf IrkaL
\lx VERBJNFLECnONS
\alt GNP
\fea Vb.Infln
\gl 2S.hon/2P.pe

```
\lf  AM
\lx  VERB_INFLECTIONS
\alt GNP
\fea Vb.Infln
\gl  3SM.pe
```

```
\lf  AL
\lx  VERB_INFLECTIONS
\alt GNP
\fea Vb.Infln
\gl  3SF.pe
```

```
\lf  um
\lx  VERB_INFLECTIONS
\alt GNP
\fea Vb.Infln
\gl  3SN.pe
```

Verb Tense Lexicon

```
; VERB_TENSE.LEX
; INCLUDE file for TAMIL.LEX
```

```
\lf  M
\k   TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\1£  kiR
\lx  TENSE
\alt Tense
\fea Pres
\gl  Present
```

```
\lf  w
\k   TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\lf  v
\lx  TENSE
\alt Tense
\fea Fut
\gl  Future
```

```
\If  ww
\k   TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\lf  p
\lx  TENSE
\alt Tense
\fea Fut
\gl  Future
```

```
\lf  R
\k   TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\lf  alAm
\lx  TENSE
\alt Tense
\fea Hort
\gl  Hortative
```

```
\lf  nw
\lx  TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\lf  Aw
\k   TENSE
\alt Tense
\fea Proh
\gl  Prohibitive
```

```
\lf  t
\lx  TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\lf  a
\k   TENSE
\alt Tense
\fea Admon
\gl  Admonitive
```

```
\lf  iM
\lx  TENSE
\alt Tense
\fea Past
\gl  Past
```

```
\lf  avillY
\k   TENSE
\alt Tense
\fea Neg.Past
\gl  Neg.Past
```

\lf amAtt
\lx TENSE
\alt Tense
\fea Neg.Fut
\gl Neg.Fut

\lf a
\lx TENSE
\alt Tense
\fea Inf
\gl Infinitive

\lf Ma
\Ix TENSE
\alt Tense
\fea Past Adj.Ppl
\gl Past Adj.Ppl

\lf wa
\lx TENSE
\alt Tense
\fea Ppl
\gl Past Adjectival Participle

\lf wwa
\lx TENSE
\alt Tense
\fea Ppl
\gl Past Adjectival Participle

\lf Ra
\lx TENSE
\alt Tense
\fea Ppl
\gl Past Adjectival Participle

\lf nwa
\lx TENSE
\alt Tense
\fea Ppl
\g| Past Adjectival Participle

\lf ta
\lx TENSE
\alt Tense
\fea Ppl
\gl Past Adjectival Participle

\lf iMa
\lx TENSE
\alt Tense
\fea Ppl
\gl Past Adjectival Participle

\lf kiRa
\lx TENSE
\alt Tense
\fea Ppl
\gl Present Adjectival Participle

\lf urn
\lx TENSE
\alt Tense
\fea Ppl
\gl Habitual Participle

\lf Awa
\lx TENSE
\alt Tense
\fea Ppl
\gl Negative Adjectival Participle

\lf wu
\lx TENSE
\alt Tense
\fea Ppl
\gl Positive Verbal Participle

\lf i
\lx TENSE
\alt Tense
\fea Ppl
\gl Positive Verbal Participle

\lf Amal
\lx TENSE
\alt Tense
\fea Ppl
\gl Negative Verbal Participle

\lf Al
\lx TENSE
\alt Tense
\fea Ppl
\gl Positive Conditional

\lf AvittAl
\lx TENSE
\alt Tense
\fea Ppl
\gl Negative Conditional

\lf koNtiru
\lx TENSE
\alt Tense
\fea Ppl
\gl Durative Conditional

GNP Lexicon

```
;GNP_TENSE.LEX
; INCLUDE file for TAMIL.LEX

\lf     avaM
\lx     GNP
\alt    GNP
\fea    GNP
\gl     3SM.gnp

\lf     var
\lx     GNP
\alt    GNP
\fea    GNP
\gl     3Shon.gnp

\lf     vaL
\lx     GNP
\alt    GNP
\fea    GNP
\gl     3SF.gnp

\lf     wu
\lx     GNP
\alt    GNP
\fea    GNP
\gl     3SN.gnp
```

Adjective Inflection Lexicon

```
; ADJECnVE_INFLECTIONS.LEX
; INCLUDE file for TAMILLEX

\lf     iya
\lx     ADJECTIVE_INFLECTIONS
\alt    gnpbase
\fea    gnpbase
\gl     Adj.Bound gnp base

\lf     vaM
\lx     ADJECTIVE_INFLECTIONS
\alt    GNP
\fea    GNP
\gl     3SM.gnp

\lf     var
\lx     ADJECTIVE_INFLECTIONS
\alt    GNP
\fea    GNP
\gl     3Shon.gnp

\lf     vaL
\lx     ADJECTIVE_INFLECTIONS
\alt    GNP
\fea    GNP
\gl     3SF.gnp
```

Common Inflection Lexicon

```
; COMMON_INFLECTIONS.LEX
; INCLUDE file for TAMIL.LEX

\lf     E
\lx     COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Emph1.Cl

\lf     O
\k      COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Intrg2.Cl

\lf     um
\lx     COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Incl1.Cl

\lf     wAM
\k      COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Emph2.Cl

\lf     Avawu
\k      COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gi     Cntg.Cl

\lf     kUta
\lx     COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Incl2.Cl

\lf     A
\lx     COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Inter.Cl

\lf     mattum
\k      COMMON_INFLECTIONS
\alt    Clitic
\fea    Cl
\gl     Restr.Cl
```

Appendix IV - a
List of Inflectional forms for the Noun *'maram'*

maram	maram]nom
maramA	maram]nom+A]cl.intr2
maramAvawu	maram]nom+Avawu]cl.min
marameVnYavA	maram]nom+eVnYa]nom.pp+A]cl.intr2
maramcVnYavAvawu	maram]nom+eVnYa]nom.pp+Avawu]cl.min
marameVnYave	maram]nom+eVnYa]nom.pp+e]cl.emph1
marameVnYakUta	maram]nom+eVnYa]nom.pp+kUta]cl.incl2
marameVnYamattum	maram]nom+eVnYa]nom.pp+mattum]cl.rest
marameVnYavo	maram]nom+eVnYa]nom.pp+o]cl.intr1
marameVnYavum	maram]nom+eVnYa]nom.pp+um]cl.incl1
marameVnYawAnY	maram]nom+eVnYa]nom.pp+wAnY]cl.emph2
maram e Vn Yappa tuvawukkU ta maram] nom+e Vn Yappatuvawu+kU ta] cl. incl2	
marameVnYappatuvawumattum	maram]nom+eVnYappatuvawu+mattum]cl.rest
marameVnYappatuvawuwAnY	maram]nom+eVnYappatuvawu+wAnY]cl.emph2
marameVnYappatuvawA maram]nom+eVnYappatuvawu] nom. pp+A] cl.intr2	
marameVnYappatuvawAvawu	maram]nom+eVnYappatuvawu]nom.pp+Avawu]cl.min
marameVnYappatuvawe	maram]nom+eVnYappatuvawu]nom.pp+e]cl.emph1
marameVnYappatuvawo maram]nom+eVnYappatuvawu] nom. pp+o]cl.intr1	
marameVnYappatuvawum maram] nom+eVnYappatuvawu] nom.pp+um]cl.incl1	
marameVnYpawukkUta	maram]nom+eVnYpawu+kUta]cl.incl2
marameVnYpawumattum	maram]nom+eVnYpawu+mattum]cl.rest
marameVnYpawuwAnY	maram]nom+eVnYpawu+wAnY]cl.emph2
marameVnYpawA	maram]nom+eVnYpawu]nom.pp+A]cl.intr2
marameVnYpawAvawu	maram]nom+eVnYpawu]nom.pp+Avawu]cl.min
marameVnYpawe	maram]nom+eVnYpawu]nom.pp+e]cl.emph1
marameVnYpawo	maram]nom+eVnYpawu]nom.pp+o]cl.intr1
marameVnYpawum	maram]nom+eVnYpawu]nom.pp+um]cl.incl1
marameVnYrYavA	maram]nom+eVnYrYa]nom.pp+A]cl.intr2
marameVnYrYavAvawu	maram]nom+eVnYrYa]nom.pp+Avawu]cl.min
marameVnYrYave	maram]nom+eVnYrYa]nom.pp+e]cl.emph1
marameVnYrYakUta	maram]nom+eVnYrYa]nom.pp+kUta]cl.incl2
marameVnYrYamattum	maram]nom+eVnYrYa]nom.pp+mattum]cl.rest
marameVnYrYavo	maram]nom+eVnYrYa]nom.pp+o]cl.intr1
marameVnYrYavum	maram]nom+eVnYrYa]nom.pp+um]cl.incl1
marameVnYrYawAnY	maram]nom+eVnYrYa]nom.pp+wAnY]cl.emph2
marameVnYrYA	maram]nom+eVnYrYu]nom.pp+A]cl.intr2
marameVnYrYAvawu	maram]nom+eVnYrYu]nom.pp+Avawu]cl.min
marameVnYrYe	maram]nom+eVnYrYu]nom.pp+e]cl.emph1
marameVnYrYukUta	maram]nom+eVnYrYu]nom.pp+kUta]cl.incl2
marameVnYrYumattum	maram]nom+eVnYrYu]nom.pp+mattum]cl.rest
marameVnYrYo	maram]nom+eVnYrYu]nom.pp+o]cl.intr1
marameVnYrYum	maram]nom+eVnYrYu]nom.pp+um]cl.incl1
marameVnYrYuwAnY	maram]nom+eVnYrYu]nom.pp+wAnY]cl.emph2
marameVnYumA	maram]nom+eVnYum]nom.pp+A]cl.intr2
marameVnYumAvawu	maram]nom+eVnYum]nom.pp+Avawu]cl.min
marameVnYume	maram]nom+eVnYum]nom.pp+e]cl.emph1
marameVnYumkUta	maram]nom+eVnYum]nom.pp+kUta]cl.incl2
marameVnYummattum maram]nom+eVn Yum] nom.pp+mattum]cl. rest	
marameVnYumo	maram]nom+eVnYum]nom.pp+o]cl.intr1
marameVnYumum maram]nom+e V nYum]nom.pp+um]cl.incl1	
marameVnYumwAnY	maram]nom+eVnYum]nom.pp+wAnY]cl.emph2
marame	maram]nom+e]cl.emph1
maramkUta	maram]nom+kUta]cl.incl2
maramkitteyA	maram]nom+kitte]nom.adv+A]cl.intr2
maramkitteyAvawu	maram]nom+kitte]nom.adv+Avawu]cl.min
maramkitte	maram]nom+kitte]nom.adv+e]cl.emph1
maramkittekUta	maram]nom+kitte]nom.adv+kUta]cl.incl2
maramkitteyo	maram]nom+kitte]nom.adv+o]cl.intr1
maramkitteyum	maram]nom+kitte]nom.adv+um]cl.incl1
maramkittewAnY maram] nom+kitte]nom.adv+w An Y]cl.emph2	
marammAwiriyA maram]nom+mAwiri] nom.pl+A] cl.intr2	
marammAwiriyAvawu maram]nom+mAwiri]nom. pl+A vawu]cl.min	
marammAwiriye	maram]nom+mAwiri]nom.pl+e]cl.emph1

marammAwirikkUta	maram]nom+mAwiri]nom.pl+kUta]cl.incl2
marammAwirimattum	maram]nom+mAwiri]nom.pl+mattum]cl.rest
marammAwiriyo	maram]nom+ mAwiri] nom.pl+o]cl.intr1
marammAwiriyum	maram]nom+mAwiri]nom.pl+um]cl.incl1
marammAwiriwAnY	maram]nom+mAwiri]nom.pl+wAnY]cl.emph2
marammattum	maram]nom+mattum]cl.rest
maramo	maram]nom+o]cl.intr1
maramponYrYA	maram]nom+ponYrYu]nom.pl+A]cI.intr2
maramponYrYAvawu	maram]nom+ponYrYu]nom.pl+Avawu]cl.min
marampooYrYc	maram]nom+ponYrYu]nom.pl+e]cl.emph1
maramponYrYukkUta	maram]nom+ponYrYu]nom.pl+kUta]cl.incl2
maramponYrYumattum	maram]nom+ponYrYu]nom.pl+mattum]cl.rest
maramponYrYo	maram]nom+ponYrYu]nom.pl+o]cl.intr1
maramponYrYum	maram]nom+ponYrYu]nom.pl+um]cl.incl1
maramponYrYuwAnY	maram]nom+ponYrYu]nom.pl+wAnY]cl.emph2
maramum	maram]nom+um]cl.incl1
maramvarEyA	maram]nom+varE]nom.adv+A]cl.intr2
maramvarEyAvawu	maram]nom+varE]nom.adv+Avawu]cl.min
maramvarEc	maram]nom+varE]nom.adv+e]cl.emph1
maramvarEkkUta	maram]nom+varE]nom.adv+kUta]cl.incl2
maramvarEmattum	maram]nom+varE]nom.adv+mattum]cl.rest
maramvarEyo	maram]nom+varE]nom.adv+o]cl.intr1
maramvarEyum	maram]nom+varE]nom.adv+um]cl.incl1
maramvarEwwAnY	maram]nom+varE]nom.adv+wAnY]cl.emph2
maramwAnY	maram]nom+wAnY]cl.emph2
marawwAlA	maram]obl+Al]ins]+A]cl.intr2
marawwAlAvawu	maram]obl+Al]ins]+Avawu]cl.min
marawwAle	maram]obl+Al]ins]+e]cl.emph1
marawwAlkUta	maram]obl+Al]ins]+kUta]cl.incl2
marawwAlmattum	maram]obl+Al]ins]+mattum]cl.rest
marawwAlo	maram]obl+Al]ins]+o]cl.intr1
marawwAlum	maram]obl+Al]ins]+um]cl.incl1
marawwAlwAnY	maram]obl+Al]ins]+wAnY]cl.emph2
marawwEyA	maram]obl+E+A]cl.intr2
marawwEyAvawu	maram]obl+E+Avawu]cl.min
marawwEe	maram]obl+E+e]cl.emph1
marawwEmattum	maram]obl+E+mattum]cl.rest
marawwEyo	maram]obl+E+o]cl.intr1
marawwEyum	maram]obl+E+um]cl.incl1
marawwEwwAnY	maram]obl+E+wAnY]cl.emph2
marawwEwwaviravA	maram]obl+E+wavira]acc.pl+A]cl.intr2
marawwEwwaviravAvawu	maram]obl+E+wavira]acc.pl+Avawu]cl.min
marawwEwwavirave	maram]obl+E+wavira]acc.pl+e]cl.emph1
marawwEwwavirakUta	maram]obl+E+wavira]acc.pl+kUta]cl.incl2
marawwEwwaviram attum	maram]obl+E+wavira]acc.pl+mattum]cl.rest
marawwEwwaviravo	maram]obl+E+wavira]acc.pl+o]cl.intr1
marawwEwwaviravum	maram]obl+E+wavira]acc.pl+um]cl.incl1
marawwEwwaviravAnY	maram]obl+E+wavira]acc.pl+wAnY]cl.emph2
marawwEccurYrYiyA	maram]obl+E]acc+curYrYi]acc.adv+A]cl.intr2
marawwEccurYrYiyAvawu	maram]obl+E]acc+curYrYi]acc.adv+Avawu]cl.min
marawwEccurYrYiye	maram]obl+E]acc+curYrYi]acc.adv+e]cl.emph1
marawwEccurYrYikkUta	maram]obl+E]acc+curYrYi]acc.adv+kUta]cl.incl2
marawwEccurYrYimattum	maram]obl+E]acc+curYrYi]acc.adv+mattum]cl.rest
marawwEccurYrYiyo	maram]obl+E]acc+curYrYi]acc.adv+o]cl.intr1
marawwEccurYrYiyum	maram]obl+E]acc+curYrYi]acc.adv+um]cl.incl1
marawwEccurYrYiwwAnY	maram]obl+E]acc+curYrYi]acc.adv+wAnY]cl.emph2
marawwEkkAttilumA	maram]obl+E]acc+kAttilum]acc.pp+A]cl.intr2
marawwEkkAttilumAvawu	maram]obl+E]acc+kAttilum]acc.pp+Avawu]cl.min
marawwEkkAttilume	maram]obl+E]acc+kAttilum]acc.pp+e]cl.emph1
marawwEkkAttilumkUta	maram]obl+E]acc+kAttilum]acc.pp+kUta]cl.incl2
marawwEkkAttilummattum	maram]obl+E]acc+kAttilum]acc.pp+mattum]cl.rest
marawwEkkAttilumo	maram]obl+E]acc+kAttilum]acc.pp+o]cl.intr1
marawwEkkAttilumum	maram]obl+E]acc+kAttilum]acc.pp+um]cl.incl1
marawwEkkAttilumwAnY	maram]obl+E]acc+kAttilum]acc.pp+wAnY]cl.emph2
marawwEkkUta	maram]obl+E]acc+kUta]cl.incl2
marawwEkkuriwwA	maram]obl+E]acc+kuriwwu]acc.pp+A]cl.intr2
marawwEkkuriwwAvawu	maram]obl+E]acc+kuriwwu]acc.pp+Avawu]cl.min
marawwEkkuriwwe	maram]obl+E]acc+kuriwwu]acc.pp+e]cl.emph1

marawwEkkuriwwukkUta	maram]obl+E]acc+kuriwwu]acc.pp+kUta]cl.incl2
marawwEkkuriwwumattum	maram]obl+E]acc+kuriwwu]acc.pp+mattum]cl.rest
marawwEkkuriwwo	maram]obl+E]acc+kuriwwu]acc.pp+o]cl.intr1
marawwEkkuriwwum	maram]obl+E]acc+kuriwwu]acc.pp+um]cl.incl1
marawwEkkuriwwuwAnY	maram]obl+E]acc+kuriwwu]acc.pp+wAnY]cl.emph2
marawwEmattilumA	maram]obl+E]acc+mattilum]acc.pp+A]cl.intr2
marawwEmattilumAvawu	maram]obl+E]acc+mattilum]acc.pp+Avawu]cl.min
marawwEmattilume	maram]obl+E]acc+mattilum]acc.pp+e]cl.emph1
marawwEmattilumkUta	maram]obl+E]acc+mattilum]acc.pp+kUta]cl.incl2
marawwEmattumattum	maram]obl+E]acc+mattilum]acc.pp+mattum]cl.rest
marawwEmattilumo	maram]obl+E]acc+mattilum]acc.pp+o]cl.intr1
marawwEmattilumum	maram]obl+E]acc+mattilum]acc.pp+um]cl.incl1
marawwEmattilumwAnY	maram]obl+E]acc+mattilum]acc.pp+wAnY]cl.emph2
marawwEpparYrYiyA	maram]obl+E]acc+parYrYi]acc.pl+A]cl.intr2
marawwEpparYrYiyAvawu	maram]obl+E]acc+parYrYi]acc.pl+Avawu]cl.min
marawwEpparYrYiye	maram]obl+E]acc+parYrYi]acc.pl+e]cl.emph1
marawwEpparYrYikkUta	maram]obl+E]acc+parYrYi]acc.pl+kUta]cl.incl2
marawwEpparYrYimattum	maram]obl+E]acc+parYrYi]acc.pl+mattum]cl.rest
marawwEpparYrYiyo	maram]obl+E]acc+parYrYi]acc.pl+o]cl.intr1
marawwEpparYrYiyum	maram]obl+E]acc+parYrYi]acc.pl+um]cl.incl1
marawwEpparYrYiwwAnY	maram]obl+E]acc+parYrYi]acc.pl+wAnY]cl.emph2
marawwEppolA	maram]obl+E]acc+pol]acc.plA]cl.intr2
marawwEppolAvawu	maram]obl+E]acc+pol]acc.plAvawu]cl.min
marawwEppole	maram]obl+E]acc+pol]acc.ple]cl.emph1
marawwEppolkUta	maram]obl+E]acc+pol]acc.plkUta]cl.incl2
marawwEppolmattum	maram]obl+E]acc+pol]acc.plmattum]cl.rest
marawwEppolo	maram]obl+E]acc+pol]acc.plo]cl.intr1
marawwEppolum	maram]obl+E]acc+pol]acc.plum]cl.incl1
marawwEppolwAnY	maram]obl+E]acc+pol]acc.plwAnY]cl.emph2
marawwEppolavA	maram]obl+E]acc+pola]acc.pl+A]cl.intr2
marawwEppolavAvawu	maram]obl+E]acc+pola]acc.pl+Avawu]cl.min
marawwEppolave	maram]obl+E]acc+pola]acc.pl+e]cl.emph1
marawwEppolakUta	maram]obl+E]acc+pola]acc.pl+kUta]cl.incl2
marawwEppolamattum	maram]obl+E]acc+pola]acc.pl+mattum]cl.rest
marawwEppolavo	maram]obl+E]acc+pola]acc.pl+o]cl.intr1
marawwEppolavum	maram]obl+E]acc+pola]acc.pl+um]cl.incl1
marawwEppolawAnY	maram]obl+E]acc+pola]acc.pl+wAnY]cl.emph2
marawwEpponYrYavA	maram]obl+E]acc+ponYrYa]acc.pl+A]cl.intr2
marawwEpponYrYavAvawu	maram]obl+E]acc+ponYrYa]acc.pl+Avawu]cl.min
marawwEpponYrYave	maram]obl+E]acc+ponYrYa]acc.pl+e]cl.emph1
marawwEpponYrYakUta	maram]obl+E]acc+ponYrYa]acc.pl+kUta]cl.incl2
marawwEpponYrYamattum	maram]obl+E]acc+ponYrYa]acc.pl+mattum]cl.rest
marawwEpponYrYavo	maram]obl+E]acc+ponYrYa]acc.pl+o]cl.intr1
marawwEpponYrYavum	maram]obl+E]acc+ponYrYa]acc.pl+um]cl.incl1
marawwEpponYrYawAnY	maram]obl+E]acc+ponYrYa]acc.pl+wAnY]cl.emph2
marawwEvitavA	maram]obl+E]acc+vita]acc.pl+A]cl.intr2
marawwEvitavAvawu	maram]obl+E]acc+vita]acc.pl+Avawu]cl.min
marawwEvitave	maram]obl+E]acc+vita]acc.pl+e]cl.emph1
marawwEvitakkUta	maram]obl+E]acc+vita]acc.pl+kUta]cl.incl2
marawwEvitamattum	maram]obl+E]acc+vita]acc.pl+mattum]cl.rest
marawwEvitavo	maram]obl+E]acc+vita]acc.pl+o]cl.intr1
marawwEvitavum	maram]obl+E]acc+vita]acc.pl+um]cl.incl1
marawwEvitawAnY	maram]obl+E]acc+vita]acc.pl+wAnY]cl.emph2
marawwilA	maram]obl+il]loc+A]cl.intr2
marawwilAvawu	maram]obl+il]loc+Avawu]cl.min
marawwile	maram]obl+il]loc+e]cl.emph1
marawwilkUta	maram]obl+il]loc+kUta]cl.incl2
marawwilmattum	maram]obl+il]loc+mattum]cl.rest
marawwilo	maram]obl+il]loc+o]cl.intr1
marawwilum	maram]obl+il]loc+um]cl.incl1
marawwilwAnY	maram]obl+il]loc+wAnY]cl.emph2
marawwilirunwA	maram]obl+ilirunwu]abl+A]cl.intr2
marawwilirunwAvawu	maram]obl+ilirunwu]abl+Avawu]cl.min
marawwilirunwe	maram] obl+ilirunwu] abl+e] cl.emph1
marawwilirunwo	maram]obl+ilirunwu]abl+o]cl.intr1
marawwilirunwum	maram]obl+ilirunwu]abl+um]cl.incl1
marawwinYUlamA	maram]obl+inY]gen+Ulam+A]cl.intr2
marawwinYmUlamAvawu	maram]obl+inY]gen+mUlam]gen.pp+Avawu]cl.min

marawwinYmUlame	maram]obl+inY]gen+mUlam]gen.pp+e]cl.emph1
marawwinYmUlamkUta	maram]obl+inY]gen+mUlam]gen.pp+kUta]cl.incl2
marawwinYmUlammattum	maram]obl+inY]gen+mUlam]gen.pp+mattum]cl.rest
marawwinYmUlamo	maram]obl+inY]gen+mUlam]gen.pp+o]cl.intr1
marawwinYmUlamum	maram]obl+inY]gen]+mUlam]gen.pp+um]cl.incl1
marawwinYmUlamwAnY	maram]obl+inY]gen]+mUlam]gen.pp+wAnY]cl.emph2
marawwinYpatiyA	maram]obl+inY]gen]+pati]gen.pl+A]cl.intr2
marawwinYpatiyAvawu	maram] obl+inY] gen]+pati]gen.pl+Avawu] cl. min
marawwinYpatiye	maram]obl+inY]gen]+pati]gen.pl+e]cl.emph1
marawwinYpatikkUta	maram]obl+inY]gen]+pati]gen.pl+kUta]cl.incl2
marawwinYpatimattum	maram]obl+inY]gen]+pati]gen.pl+mattum]cl.rest
marawwinYpatiyo	maram]obl+inY]gen]+pati]gen.pl+o]cl.intr1
marawwinYpatiyum	maram]obl+inY]gen]+pati]gen.pl+um]cl.incl1
marawwinYpatiwAnY	maram]obl+inY]gen]+pati]gen.pl+wAnY]cl.emph2
marawwirYkAnYawA	maram]obl+irYku]dat+AnYa]dat.pp+A]cl.intr2
marawwirYkAnYawAvawu	maram]obl+irYku]dat+AnYa]dat.pp+Avawu]cl.min
marawwirYkAnYawukUta	maram]obl+irYku]dat+AnYa]dat.pp+a+kUta]cl.incl2
marawwirYkAnYawumattum	maram]obl+irYku]dat+AnYa]dat.pp+a+mattum]cl.rest
marawwirYkAnYawuwAnY	maram]obl+irYku]dat+AnYa]dat.pp+a+wAnY]cl.emph2
marawwirYkAnYawe	maram]obl+irYku]dat+AnYa]dat.pp+e]cl.emph1
marawwirYkAnYawo	maram]obl+irYku]dat+AnYa]dat.pp+o]cl.intr1
marawwirYkAnYawum	maram]obl+irYku]dat+AnYa]dat.pp+um]cl.incl1
marawwirYkuriyawA	maram]obl+irYku]dat+uriya]dat.pp+A]cl.intr2
marawwirYkuriyawAvawu	maram]obl+irYku]dat+uriya]dat.pp+Avawu]cl.min
marawwirYkuriyawe	maram]obl+irYku]dat+uriya]dat.pp+e]cl.emph1
marawwirYkuriyawukkUta	maram]obl+irYku]dat+uriya]dat.pp+kUta]cl.incl2
marawwirYkuriyawumattum	maram]obl+irYku]dat+uriya]dat.pp+mattum]cl.rest
marawwirYkuriyawo	maram]obl+irYku]dat+uriya]dat.pp+o]cl.intr1
marawwirYkuriyawum	maram]obl+irYku]dat+uriya]dat.pp+um]cl.incl1
marawwirYkuriyawuwAnY	maram]obl+irYku]dat+uriya]dat.pp+wAnY]cl.emph2
marawwitamA	maram] obl+itam] loc+A] cl. intr2
marawwitamAvawu	maram]obl+itam]loc+Avawu]cl.min
marawwitame	maram]obl+itam]loc+e]cl.emph1
marawwitamkUta	maram]obl+itam]loc+kUta]cl.incl2
marawwitammattum	maram]obl+itam]loc+mattum]cl.rest
marawwitamo	maram]obl+itam]loc+o]cl.intr1
marawwitamum	maram]obl+itam]loc+um]cl.incl1
marawwitamwAnY	maram]obl+itam]loc+wAnY]cl.emph2
marawwitamirunwA	maram]obl+itamirunwu]abl+A]cl.intr2
marawwitamirunwAvawu	maram]obl+itamirunwu]abl+Avawu]cl.min
marawwitamirunwe	maram]obl+itamirunwu]abl+e]cl.emph1
marawwitaminnwukkUta	maram]obl+itamirunwu]abl+kUta]cl.incl2
marawwitaminnwumattum	maram]obl+itamirunwu]abl+mattum]cl.rest
marawwitaminwo	maram]obl+itamirunwu]abl+o]cl.intr1
marawwitamirunwum	maram]obl+itamirunwu]abl+um]cl.incl1
marawwitamirunwuwAnY	maram]obl+itamirunwu]abl+wAnY]cl.emph2
marafkalY	maram]obl+kalY]plur
marafkalYA	maram]obl+kalY]plur+A]cl.intr2
marafkalYAlA	maram]obl+kalY]plur+All]ins] +A]cl.intr2
marafkalYAlAvawu	maram]obl+kalY]plur+All]ins]+Avawu]cl.min
marafkalYAle	maram]obl+kalY]plur+All]ins]+e]cl.emph1
marafkalYAlkUta	maram]obl+kalY]plur+All]ins]+kUta]cl.incl2
marafkalYAlmattum	maram]obl+kalY]plur+All]ins]+mattum]cl.rest
marafkalYAlo	maram]obl+kalY]plur+All]ins]+o]cl.intr1
marafkalYAlum	maram]obl+kalY]plur+All]ins]+um]cl.incl1
marafkalYAiwAnY	maram]obl+kalY]plur+All]ins]+wAnY]cl.emph2
marafkalYAvawu	maram]obl+kalY]plur+Avawu]cl.min
marafkalYEyA	maram]obl+kalY]plur+E+A]cl.intr2
marafkalYEyAvawu	maram]obl+kalY]plur+E+Avawu]cl.min
marafkalYEye	maram]obl+kalY]plur+E+e]cl.emph1
marafkalYEmatturn	maram]obl+kalY]plur+E+mattum]cl.rest
marafkalYEyo	maram]obl+kalY]plur+E+o]cl.intr1
marafkalYEyum	maram]obl+kalY]plur+E+um]cl.incl1
marafkalYEwwAnY	maram]obl+kalY]plur+E+wAnY]cl.emph2
marafkalYEwwaviravA	maram]obl+kalY]plur+E+wavira]acc.pl+A]cl.intr2
marafkalYEwwaviravAvawu	maram]obl+kalY]plur+E+wavira]acc.pl+Avawu]cl.min
marafluIY Ewwavirave	maram]obl+kalY]plur+E+wavira]acc.pl+e]cl.emph1
marafkalYEwwavirakUta	maram]ob!+kalY]plur+E+wavira]acc.pl+kUta]cl.iad2

marafkalYEwwaviramattum	maram]obl+kalY]plur+E+wavira]acc.pl+mattum]cl.rest
marafkalYEwwaviravo	maram]obl+kalY]plur+E+wavira]acc.pl+o]cl.intr1
marafkalYEwwaviravum	maram]obl+kalY]plur+E+wavira]acc.pl+um]cl.incl1
marafkalYEwwaviravAnY	maram]obl+kalY]plur+E+wavira]acc.pl+wAnY]cl.emph2
marafkalYEccurYrYiyA	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+A]cl.intr2
marafkalYEccurYrYiyAvawu	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+Avawu]cl.min
marafkalYEccurYrYiye	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+e]cl.emph1
marafkalYEccurYrYikkUta	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+kUta]cl.incl2
marafkalYEccurYrYimattum	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+mattum]cl.rest
marafkalYEccurYrYiyo	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+o]cl.intr1
marafkalYEccurYrYiyum	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+um]cl.incl1
marafkalYEccurYrYiwwAnY	maram]obl+kalY]plur+E]acc+curYrYi]acc.adv+wAnY]cl.emph2
marafkalYEkkAttilumA	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+A]cl.intr2
marafkalYEkkAttilumAvawu	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+Avawu]cl.min
marafkalYEkkAttilume	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+e]cl.emph1
marafkalYEkkAttilumkUta	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+kUta]cl.incl2
marafkalYEkkAttilummattum	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+mattum]cl.rest
marafkalYEkkAttilumo	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+o]cl.intr1
marafkalYEkkAttilumum	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+um]cl.incl1
marafkalYEkkAttilumwAnY	maram]obl+kalY]plur+E]acc+kAttilum]acc.pp+wAnY]cl.emph2
marafkalYEkkuriwwA	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+A]cl.intr2
marafkalYEkkuriwwAvawu	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+Avawu]cl.min
marafkalYEkkuriwwe	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+e]cl.emph1
marafkalYEkkuriwwukkUta	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+kUta]cl.incl2
marafkalYEkkuriwwumattum	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+mattum]cl.rest
marafkalYEkkuriwwo	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+o]cl.intr1
marafkalYEkkuriwwum	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+um]cl.incl1
marafkalYEkkuriwwuwAnY	maram]obl+kalY]plur+E]acc+kuriwwu]acc.pp+wAnY]cl.emph2
marafkalYEmattilumA	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+A]cl.intr2
marafkalYEmattilumAvawu	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+Avawu]cl.min
marafkalYEmattilume	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+e]cl.emph1
marafkalYEmattilumkUta	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+kUta]cl.incl2
marafkalYEmattilummattum	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+mattum]cl.rest
marafkalYEmattilumo	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+o]cl.intr1
marafkalYEmattilumum	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+um]cl.incl1
marafkalYEmattilumwAnY	maram]obl+kalY]plur+E]acc+mattilum]acc.pp+wAnY]cl.emph2
marafkalYEpparYrYiyA	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+A]cl.intr2
marafkalYEpparYrYiyAvawu	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+Avawu]cl.min
marafkalYEpparYrYiye	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+e]cl.emph1
marafkalYEpparYrYikkUta	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+kUta]cl.incl2
marafkalYEpparYrYimattum	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+mattum]cl.rest
marafkalYEpparYrYiyo	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+o]cl.intr1
marafkalYEpparYrYiyum	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+um]cl.incl1
marafkalYEpparYrYiwwAnY	maram]obl+kalY]plur+E]acc+parYrYi]acc.pl+wAnY]cl.emph2
marafkalYEppolA	maram]obl+kalY]plur+E]acc+pol]acc.plA]cl.intr2
marafkalYEppolAvawu	maram]obl+kalY]plur+E]acc+pol]acc.plAvawu]cl.min
marafkalYEppole	maram]obl+kalY]plur+E]acc+pol]acc.ple]cl.emph1
marafkalYEppolkUta	maram]obl+kalY]plur+E]acc+pol]acc.plkUta]cl.incl2
marafkalYEppolmattum	maram]obl+kalY]plur+E]acc+pol]acc.plmattum]cl.rest
marafkalYEppolo	maram]obl+kalY]plur+E]acc+pol]acc.plo]cl.intr1
marafkalYEppolum	maram]obl+kalY]plur+E]acc+pol]acc.plum]cl.incl1
marafkalYEppolwAnY	maram]obl+kalY]plur+E]acc+pol]acc.plwAnY]cl.emph2
marafkalYEppolavA	maram]obl+kalY]plur+E]acc+pola]acc.pl+A]cl.intr2
marafkalYEppolavAvawu	maram]obl+kalY]plur+E]acc+pola]acc.pl+Avawu]cl.min
marafkalYEppolave	maram]obl+kalY]plur+E]acc+pola]acc.pl+e]cl.emph1
marafkalYEppolakUta	maram]obl+kalY]plur+E]acc+pola]acc.pl+kUta]cl.incl2
marafkalYEppolamattum	maram]obl+kalY]plur+E]acc+pola]acc.pl+mattum]cl.rest
marafkalYEppolavo	maram]obl+kalY]plur+E]acc+pola]acc.pl+o]cl.intr1
marafkalYEppolavum	maram]obl+kalY]plur+E]acc+pola]acc.pl+um]cl.incl1
marafkalYEppolawAnY	maram]obl+kalY]plur+E]acc+pola]acc.pl+wAnY]cl.emph2
marafkalYEpponYrYavA	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+A]cl.intr2
marafkalYEpponYrYavAvawu	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+Avawu]cl.min
marafkalYEpponYrYave	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+e]cl.emph1
marafkalYEpponYrYakUta	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+kUta]cl.incl2
marafkalYEpponYrYamattum	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+mattum]cl.rest
marafkalYEpponYrYavo	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+o]cl.intr1
marafkalYEpponYrYavum	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+um]cl.incl1
marafkalYEpponYrYawAnY	maram]obl+kalY]plur+E]acc+ponYrYa]acc.pl+wAnY]cl.emph2

marafkalYEvitavA	maram]obl+ka]Y]plur+E]acc+vita]acc.pl+A]d.intr2
marafkalYEvitavAvawu	maram]obl+kalY]plur+E]acc+vita]acc.pl+Avawu]cl.min
marafkalYEvitave	maram]obl+kalY]plur+E]acc+vita]acc.pl+e]cl.emph1
marafkalYEvitakUta	maram]obl+kalY]plur+E]acc+vita]acc.pl+kUta]cl.incl2
marafkalYEvitamattum	maram]obl+kalY]plur+E]acc+vita]acc.pl+mattum]cl.rest
marafkalYEvitavo	maram]obl+kalY]plur+E]acc+vita]acc.pl+o]cl.intr1
marafkalYEvitavum	maram]obl+kalY]plur+E]acc+vita]acc.pl+um]cl.incl1
marafkalYEvitawAnY	maram]obl+kalY]plur+E]acc+vita]acc.pl+wAnY]cl.emph2
marafkalYEkkUta	maram]obl+kalY]plur+Ek+kUta]cl.incl2
marafkalYeVnYavA	maram]obl+kalY]plur+eVnYa]obl.pp+A]cl.intr2
marafkalYeVnYavAvawu	maram]obl+kalY]plur+eVnYa]obl.pp+Avawu]cl.min
marafkalYeVnYave	maram]obl+kalY]plur+eVnYa]obl.pp+e]cl.emph1
marafkalYeVnYavkUta	maram]obl+kalY]plur+eVnYa]obl.pp+kUta]cl.incl2
marafkalYeVnYavmattum	maram]obl+kalY]plur+eVnYa]obl.pp+mattum]cl.rest
marafkalYeVnYavo	maram]obl+kalY]plur+eVnYa]obl.pp+o]cl.intr1
marafkalYeVnYavum	maram]obl+kalY]plur+eVnYa]obl.pp+um]cl.incl1
marafkalYeVnYavwAnY	maram]obl+kalY]plur+eVnYa]obl.pp+wAnY]cl.emph2
marafkalYeVnYappatuvawukkUta	maram]obl+kalY]plur+eVnYappatuvawu+kUta]cl.incl2
mara fltalY e VnYappatuvawumattum	maram]obl+kalY]plur+eVnYappatuvawu+mattum]cl.rest
marafkalYeVnYappatuvawuwAnY	maram]obl+kalY]plur+eVnYappatuvawu+wAnY]cl.emph2
marafkalYeVnYappatuvawA	maram]obl+kalY]plur+eVnYappatuvawu]obl.pp+A]cl.intr2
marafkalYeVnYappatuvawAvawu	maram]obl+kalY]plur+eVnYappatuvawu]obl.pp+Avawu]cl.min
marafkalYeVnYappatuvawe	maram]obl+kalY]plur+eVnYappatuvawu]obl.pp+e]cl.emph1
marafkalYeVnYappatuvawo	maram]obl+kalY]plur+eVnYappatuvawu]obl.pp+o]cl.intr1
marafkalYeVnYappatuvawum	maram]obl+kalY]plur+eVnYappatuvawu]obl.pp+um]cl.incl1
marafkalYeVnYpawukkUta	maram]obl+kalY]plur+eVnYpawu+kUta]cl.incl2
marafkalYeVnYpawumattum	maram]obl+kalY]plur+eVnYpawu+mattum]cl.rest
marafkalYeVnYpawuwAnY	maram]obl+kalY]plur+eVnYpawu+wAnY]cl.emph2
marafkalYeVnYpawA	maram]obl+kalY]plur+eVnYpawu]obl.pp+A]cl.intr2
marafkalYeVnYpawAvawu	maram]obl+kalY]plur+eVnYpawu]obl.pp+Avawu]cl.min
marafkalYeVnYpawe	maram]obl+kalY]plur+eVnYpawu]obl.pp+e]cl.emph1
marafkalYeVnYpawo	maram]obl+kalY]plur+eVnYpawu]obl.pp+o]cl.intr1
marafkalYeVnYpawum	maram]obl+kalY]plur+eVnYpawu]obl.pp+um]cl.incl1
marafkalYeVnYrYavA	maram]obl+kalY]plur+eVnYrYa]obl.pp+A]cl.intr2
marafkalYeVnYrYavAvawu	maram]obl+kalY]plur+eVnYrYa]obl.pp+Avawu]cl.min
marafkalYeVnYrYave	maram]obl+kalY]plur+eVnYrYa]obl.pp+e]cl.emph1
marafkalYeVnYrYavkUta	maram]obl+kalY]plur+eVnYrYa]obl.pp+kUta]cl.incl2
marafkalYeVnYrYavmattum	maram]obl+kalY]plur+eVnYrYa]obl.pp+mattum]cl.rest
marafkalYeVnYrYavo	maram]obl+kalY]plur+eVnYrYa]obl.pp+o]cl.intr1
marafkalYeVnYrYavum	maram]obl+kalY]plur+eVnYrYa]obl.pp+um]cl.incl1
marafkalYeVnYrYavwAnY	maram]obl+kalY]plur+eVnYrYa]obl.pp+wAnY]cl.emph2
marafkalYeVnYrYA	raaram]obl+kalY]pluH-eVnYfYu]obl.pp+A]cLmtl2
marafkalYeVnYrYAvawu	maram]obl+kalY]plur+eVnYrYu]obl.pp+Avawu]cl.min
marafkalYeVnYrYe	maram]obl+kalY]plur+eVnYrYu]obl.pp+e]cl.emph1
marafkalYeVnYrYkUta	maram]obl+kalY]plur+eVnYrYu]obl.pp+kUta]cl.incl2
marafkalYeVnYrYmattum	maram]obl+kalY]plur+eVnYrYu]obl.pp+mattum]cl.rest
marafkalYeVnYrYo	maram]obl+kalY]plur+eVnYrYu]obl.pp+o]cl.intr1
marafkalYeVnYrYum	maram]obl+kalY]plur+eVnYrYu]obl.pp+um]cl.incl1
marafkalYeVnYrYwAnY	maram]obl+kalY]plur+eVnYrYu]obl.pp+wAnY]cl.emph2
marafkalYeVnYumA	maram]obl+kalY]plur+eVnYum]obl.pp+A]cl.intr2
marafkalYeVnYumAvawu	maram]obl+kalY]plur+eVnYum]obl.pp+Avawu]cl.min
marafkalYeVnYume	maram]obl+kalY]plur+eVnYum]obl.pp+e]cl.emph1
marafkalYeVnYumkUta	maram]obl+kalY]plur+eVnYum]obl.pp+kUta]cl.incl2
marafkalYeVnYummattum	maram]obl+kalY]plur+eVnYum]obl.pp+mattum]cl.rest
marafkalYeVnYumo	maram]obl+kalY]plur+eVnYum]obl.pp+o]cl.intr1
marafkalYeVnYumum	maram]obl+kalY]plur+eVnYum]obl.pp+um]cl.incl1
marafkalYeVnYumwAnY	maram]obl+kalY]plur+eVnYum]obl.pp+wAnY]cl.emph2
marafkalYe	maram]obl+kalY]plur+e]cl.emph1
marafkalYilA	maram]obl+kalY]plur+il]loc+A]cl.intr2
marafkalYilAvawu	maram]obl+kalY]plur+il]loc+Avawu]cl.min
marafkalYile	maram]obl+kalY]plur+il]loc+e]cl.emph1
marafkalYilkUta	maram]obl+kalY]plur+il]loc+kUta]cl.incl2
marafkalYilmattum	maram]obl+kalY]plur+il]loc+mattum]cl.rest
marafkalYilo	maram]obl+kalY]plur+il]loc+o]cl.intr1
marafkalYilum	maram]obl+kalY]plur+il]loc+um]cl.incl1
marafkalYilwAnY	maram]obl+kalY]plur+il]loc+wAnY]cl.emph2
marafkalYilirunwA	maram]obl+kalY]plur+ilirunwu]abl+A]cl.intr2
raarafkalYilinmwAvawu	maram]obl+kalY]plur+ilirunwu]abl+Avawu]cl.min

mara fkalYilirunwe	maram]obl+kalY]plur+ilirunwu]abl+e]cl.emph1
marafkalYilirunwo	maram]obl+kalY]plur+ilirunwu]abl+o]cl.intr1
marafkalYilirunwum	maram]obl+kalY]plur+ilirunwu]abl+um]cl.incl1
marafkalYinYmUlamA	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+A]cl.intr2
marafkalYinYmUlamAvawu	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+Avawu]cl.min
marafkalYinYmUlame	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+e]cl.emph1
marafkalYinYmUlamkUta	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+kUta]cl.incl2
marafkalYinYmUlammattum	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+mattum]cl.rest
marafkalYinYmUlamo	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+o]cl.intr1
mara fkalYin YmUlam um	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+um]cl.incl1
marafkalYinYmUlamwAnY	maram]obl+kalY]plur+inY]gen+mUlam]gen.pp+wAnY]cl.emph2
marafkalYinYpatiyA	maram]obl+kalY]plur+inY]gen+pati]gen.pp+A]cl.intr2
marafkalYinYpatiyAvawu	maram]obl+kalY]plur+inY]gen+pati]gen.pp+Avawu]cl.min
marafkalYinYpatiye	maram]obl+kalY]plur+inY]gen+pati]gen.pp+e]cl.emph1
marafkalYinYpatikkUta	maram]obl+kalY]plur+inY]gen+pati]gen.pp+kUta]cl.incl2
marafkalYinYpatimattum	maram]obl+kalY]plur+inY]gen+pati]gen.pp+mattum]cl.rest
marafkalYinYpatiyo	maram]obl+kalY]plur+inY]gen+pati]gen.pp+o]cl.intr1
marafkalYinYpatiyum	maram]obl+kalY]plur+inY]gen+pati]gen.pp+um]cl.incl1
marafkalYinYpatiwAnY	maram]obl+kalY]plur+inY]gen+pati]gen.pp+wAnY]cl.emph2
marafkalYirYkAnYawA	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+A]cl.intr2
marafkalYirYkAnYawAvawu	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+Avawu]cl.min
marafkalYirYkAnYawukkUta	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+a+kUta]cl.incl2
marafkalYirYkAnYawumattum	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+a+mattum]cl.rest
marafkalYirYkAnYawuwAnY	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+a+wAnY]cl.emph2
marafkalYirYkAnYawe	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+e]cl.emph1
marafkalYirYkAnYawo	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+o]cl.intr1
marafkalYirYkAnYawum	maram]obl+kalY]plur+irYku]dat+AnYa]dat.pp+um]cl.incl1
marafkalïir ï "kuriyawA	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+A]cl.intr2
marafkalYirYkuriyawAvawu	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+Avawu]cl.min
marafkalYirYkuriyawe	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+e]cl.emph1
marafkalYirYkuriyawukkUta	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+kUta]cl.incl2
marafkalYirYkuriyawumattum	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+mattum]cl.rest
marafkalYirYkuriyawo	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+o]cl.intr1
mara fkalYirYkuriyawum	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+um]cl.incl1
marafkalYirYkuriyawuwAnY	maram]obl+kalY]plur+irYku]dat+uriya]dat.pp+wAnY]cl.emph2
mara fkalYitamA	maram]obl+kalY]plur+itam]loc+A]cl.intr2
marafkalYitamAvawu	maram]obl+kalY]plur+itam]loc+Avawu]cl.min
marafkalYitame	maram]obl+kalY]plur+itam]loc+e]cl.emph1
marafkalYitamkUta	maram]obl+kalY]plur+itam]loc+kUta]cl.incl2
marafkalYitammattum	maram]obl+kalY]plur+itam]loc+mattum]cl.rest
marafkalYitamo	maram]obl+kalY]plur+itam]loc+o]cl.intr1
mara fkalYitamum	maram]obl+kalY]plur+itam]loc+um]cl.incl1
marafkalYitamwAnY	maram]obl+kalY]plur+itam]loc+wAnY]cl.emph2
marafkalYitamirunwA	maram]obl+kalY]plur+itamirunwu]abl+A]cl.intr2
marafkalYitamirunwAvawu	maram] obl+kalY]plur+ itamirunwu] abl+ A vawu] cl. min
marafkalYitamirunwe	maram]obl+kalY]plur+itamirunwu]abl+e]cl.emph1
marafkalYitamirunwukkUta	maram]obl+kalY]plur+itamirunwu]abl+kUta]cl.incl2
marafkalYitamirunwumattum	maram]obl+kalY]plur+itamirunwu]abl+mattum]cl.rest
marafkalYitamirunwo	maram]obl+kalY]plur+itamirunwu]abl+o]cl.intr1
marafkalYitamirunwum	maram] obl+kalY]plur+ itamirunwu] abl+ um] cl. incl 1
marafkalYitamirunwuwAnY	maram]obl+kalY]plur+itamirunwu]abl+wAnY]cl.emph2
marafkalYkUta	maram]obl+kalY]plur+kUta]cl.incl2
marafkalYkitteyA	maram]obl+kalY]plur+kitte]obl.adv+A]cl.intr2
marafkalYkitteyAvawu	maram]obl+kalY]plur+kitte]obl.adv+Avawu]cl.min
mara fkalYkitteye	maram]obl+kalY]plur+kitte]obl.adv+e]cl.emph1
marafkalYkitteykUta	maram]obl+kalY]plur+kitte]obl.adv+kUta]cl.incl2
marafkalYkitteyo	maram]obl+kalY]plur+kitte]obl.adv+o]cl.intr1
marafkalYkitteyum	maram]obl+kalY]plur+kitte]obl.adv+um]cl.incl1
marafkalYkitteywAnY	maram]obl+kalY]plur+kitte]obl.adv+wAnY]cl.emph2
marafkalYmAwiriyA	maram]obl+kalY]plur+mAwiri]obl.pl+A]cl.intr2
marafkalYmAwiriyAvawu	maram]obl+kalY]plur+mAwiri]obl.pl+Avawu]cl.min
marafkalYmAwiriye	maram]obl+kalY]plur+mAwiri]obl.pl+e]cl.emph1
marafkalYmAwiriykUta	maram]obl+kalY]plur+mAwiri]obl.pl+kUta]cl.incl2
marafkalYmAwiriymattum	maram]obl+kalY]plur+mAwiri] obl. pl+ mattum] cl. rest
marafkalYmAwiriyo	maram]obl+kalY]plur+mAwiri]obl.pl+o]cl.intr1
mara fkalYmAwiriyum	maram]obl+kalY]plur+mAwiri]obl.pl+um]cl.incl1
marafkalYmAwiriywAnY	maram]obl+kalY]plur+mAwiri]obl.pl+wAnY]cl.emph2
marafkalYmattum	maram]obl+kalY]plur+mattum]cl.rest

marafkalYo	maram]obl+kalY]plur+o]cl.intr1
marafkalYotA	maram]obl+kalY]plur+otu]soc+A]cl.intr2
marafkalYotAvawu	maram] obl+kalY] plur+otu]soc+Avawu] cl. min
marafkalYote	maram]obl+kalY]plur+otu]soc+e]cl.emph1
mara fkal Y otukkUta	maram]obl+kalY]plur+otu]soc+kUta]cl.incl2
marafkalYotumattum	maram]obl+kalY]plur+otu]soc+mattum]cl.rest
marafkalYoto	maram]obl+kalY]plur+otu]soc+o]cl.intr1
marafkalYotum	maram]obl+kalY]plur+otu]soc+um]cl.incl1
marafkalYotuwAnY	maram]obl+kalY]plur+otu]soc+wAnY]cl.emph2
marafkalYponYrYA	maram]obl+kalY]plur+ponYrYu]obl.pl+A]cl.intr2
marafkalYponYrYAvawu	maram]obl+kalY]plur+ponYrYu]obl.pl+Avawu]cl.min
marafkalYponYrYe	maram]obl+kalY]plur+ponYrYu]obl.pl+e]cl.emph1
marafkalYponYrYkUta	maram]obl+kalY]plur+ponYrYu]obl.pl+kUta]cl.incl2
marafkalYponYrYmattum	maram]obl+kalY]plur+ponYrYu]obl.pl+mattum]cl.rest
marafkalYponYrYo	maram]obl+kalY]plur+ponYrYu]obl.pl+o]cl.intr1
marafkalYponYrYum	maram]obl+kalY]plur+ponYrYu]obl.pl+um]cl.incl1
marafkalYponYrYwAnY	maram]obl+kalY]plur+ponYrYu]obl.pl+wAnY]cl.emph2
marafkalYukkAkavA	maram]obl+kalY]plur+ukkAka]ben+A]cl.intr2
marafkalYukkAkavAvawu	maram]obl+kalY]plur+ukkAka]ben+Avawu]cl.min
marafkalYukkAkave	maram]obl+kalY]plur+ukkAka]ben+e]cl.emph1
marafkalYukkAkakUta	maram]obl+kalY]plur+ukkAka]ben+kUta]cl.incl2
marafkalYukkAkamattum	maram]obl+kalY]plur+ukkAka]ben+mattum]cl.rest
marafkalYukkAkavo	maram]obl+kalY]plur+ukkAka]ben+o]cl.intr1
marafkalYukkAkavum	maram]obl+kalY]plur+ukkAka]ben+um]cl.incl1
marafkalYukkAkawAnY	maram]obl+kalY]plur+ukkAka]ben+wAnY]cl.emph2
marafkalYukkA	maram]obl+kalY]plur+ukku]dat+A]cl.intr2
marafkalYukkAvawu	maram]obl+ kalY]plur+ ukku] dat+Avawu]cl.min
marafkalYukkappAlA	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+A]cl.intr2
marafkalYukkappAlAvawu	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+Avawu]cl.min
marafkalYukkappAle	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+e]cl.emph1
marafkalYukkappAlkUta	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+kUta]cl.incl2
marafkalYukkappAlmattum	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+mattum]cl.rest
marafkalYukkappAlo	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+o]cl.intr1
marafkalYukkappAlum	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+um]cl.incl1
marafkalYukkappAlwAnY	maram]obl+kalY]plur+ukku]dat+appAl]dat.adv+wAnY]cl.emph2
marafkalYukkarukilA	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+A]cl.intr2
marafkalYukkarukilAvawu	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+Avawu]cl.min
marafkalYukkarukile	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+e]cl.emph1
marafkalYukkarukilkUta	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkarukilmattum	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+mattum]cl.rest
mara fkalYukkarukilo	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+o]cl.intr1
marafkalYukkarukilum	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+um]cl.incl1
marafkalYukkarukilwAnY	maram]obl+kalY]plur+ukku]dat+aruk]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkatilA	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+A]cl.intr2
marafkalYukkatilAvawu	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+Avawu]cl.min
mara fkalYukkatile	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+e]cl.emph1
marafkalYukkatilkUta	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkatilmattum	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+mattum]cl.rest
mara fkalYukkatilo	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+o]cl.intr1
marafkalYukkatilum	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+um]cl.incl1
marafkalYukkatilwAnY	maram]obl+kalY]plur+ukku]dat+ati]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkeVwirA	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv+A]cl.intr2
marafkalYukkeVwirAvawu	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv+Avawu]cl.min
marafkalYukkeVwire	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv+e]cl.emph1
marafkalYukkeVwiro	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv+o]cl.intr1
mara fkalYukkeVwirum	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv+um]cl.incl1
marafkalYukkeVwirilkUta	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkeVwirilmattum	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv]dat.adv+il]loc+mattum]cl.rest
marafkalYukkeVwirilwAnY	maram]obl+kalY]plur+ukku]dat+eVwir]dat.adv]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukke	maram]obl+kalY]plur+ukku]dat+e]cl.emph1
marafkalYukkitEyA	maram]obl+kalY]plur+ukku]dat+itE+A]cl.intr2
marafkalYukkitEyAvawu	maram]obl+kalY]plur+ukku]dat+itE+Avawu]cl.min
marafkalYukkitEe	maram]obl+kalY]plur+ukku]dat+itE+e]cl.emph1
marafkalYukkitEkkUta	maram]obl+kalY]plur+ukku]dat+itE+kUta]cl.incl2
marafkalYukkitEmattum	maram]obl+kalY]plur+ukku]dat+itE+mattum]cl.rest
marafkalYukkitEyo	maram]obl+kalY]plur+ukku]dat+itE+o]cl.intr1
marafkalYukkitEyum	maram]obl+kalY]plur+ukku]dat+itE+um]cl.incl1
marafkalYukkitEwwAnY	maram]obl+kalY]plur+ukku]dat+itE+wAnY]cl.emph2

marafkalYukkukkUta	maram]obl+kalY]plur+ukku]dat+kUta]cl.incl2
marafkalYukkukkilYakkilA	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+A]cl.intr2
marafkalYukkukkilYakkilAvawu	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+Avawu]cl.min
marafkalYukkukkilYakkile	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+e]cl.emph1
marafkalYukkukkilYakkilkUta	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkukkilYakkilmattum	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+mattum]cl.rest
marafkalYukkukkilYakkilo	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+o]cl.intr1
marafkalYukkukkilYakkilum	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+um]cl.incl1
marafkalYukkukkilYakkilwAnY	maram]obl+kalY]plur+ukku]dat+kilYYakku]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkumattum	maram]obl+kalY]plur+ukku]dat+mattum]cl.rest
marafkalYukkumawwiyilA	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+A]cl.intr2
marafkalYukkumawwiyilAvawu	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+Avawu]cl.min
marafkalYukkumawwiyile	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+e]cl.emph1
marafkalYukkumawwiyilkUta	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkumawwiyilmattum	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+mattum]cl.rest
marafkalYukkumawwiyilo	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+o]cl.intr1
marafkalYukkumawwiyilum	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+um]cl.incl1
marafkalYukkumawwiyilwAnY	maram]obl+kalY]plur+ukku]dat+mawwi]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkumelA	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+A]cl.intr2
marafkalYukkumelAvawu	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+Avawu]cl.min
marafkalYukkumele	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+e]cl.emph1
marafkalYukkumelkUta	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+kUta]cl.incl2
marafkalYukkumelmattum	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+mattum]cl.rest
marafkalYukkumelo	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+o]cl.intr1
marafkalYukkumelum	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+um]cl.incl1
marafkalYukkumelwAnY	maram]obl+kalY]plur+ukku]dat+mel]dat.adv+wAnY]cl.emph2
marafkalYukkumerYkilA	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+A]cl.intr2
marafkalYukkumerYkilAvawu	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+Avawu]cl.min
marafkalYukkumerYkile	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+e]cl.emph1
marafkalYukkumerYkilkUta	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkumerYkilmattum	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+mattum]cl.rest
marafkalYukkumerYkilo	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+o]cl.intr1
marafkalYukkumerYkilum	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+um]cl.incl1
marafkalYukkumerYkilwAnY	maram]obl+kalY]plur+ukku]dat+merYku]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkumunYnYA	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+A]cl.intr2
marafkalYukkumunYnYAvawu	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+Avawu]cl.min
marafkalYukkumunYnYe	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+e]cl.emph1
marafkalYukkumunYkUta	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+kUta]cl.incl2
marafkalYukkumunYmattum	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+mattum]cl.rest
marafkalYukkumunYnYo	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+o]cl.intr1
marafkalYukkumunYnYum	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+um]cl.incl1
marafkalYukkumunYwAnY	maram]obl+kalY]plur+ukku]dat+munY]dat.adv+wAnY]cl.emph2
marafkalYukkumunYnYAlA	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+A]cl.intr2
marafkalYukkumunYnYAlAvawu	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+Avawu]cl.min
marafkalYukkumunYnYAle	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+e]cl.emph1
marafkalYukkumunYnYAlkUta	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+kUta]cl.incl2
marafkalYukkumunYnYAlmattum	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+mattum]cl.rest
marafkalYukkumunYnYAlo	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+o]cl.intr1
marafkalYukkumunYnYAlum	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+um]cl.incl1
marafkalYukkumunYnYAlwAnY	maram]obl+kalY]plur+ukku]dat+munYnYAl]dat.adv+wAnY]cl.emph2
marafkalYukkumunYpA	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+A]cl.intr2
marafkalYukkumunYpAvawu	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+Avawu]cl.min
marafkalYukkumunYpe	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+e]cl.emph1
marafkalYukkumunYpukkUta	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+kUta]cl.incl2
marafkalYukkumunYpumattum	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+mattum]cl.rest
marafkalYukkumunYpo	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+o]cl.intr1
marafkalYukkumunYpum	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+um]cl.incl1
marafkalYukkumunYpuwAnY	maram]obl+kalY]plur+ukku]dat+munYpu]dat.adv+wAnY]cl.emph2
marafkalYukkumunwiyA	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+A]cl.intr2
marafkalYukkumunwiyAvawu	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+Avawu]cl.min
marafkalYukkumunwiye	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+e]cl.emph1
marafkalYukkumunwikkUta	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+kUta]cl.incl2
marafkalYukkumunwimattum	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+mattum]cl.rest
marafkalYukkumunwiyo	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+o]cl.intr1
marafkalYukkumunwiyum	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+um]cl.incl1
marafkalYukkumunwiwAnY	maram]obl+kalY]plur+ukku]dat+munwi]dat.adv+wAnY]cl.emph2
marafkalYukkunatuvilA	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+A]cl.intr2
marafkalYukkunatuvilAvawu	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+Avawu]cl.min

marafkalYukkunatuvile	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+e]cl.emph1
marafkalYukkunatuvilkUta	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkunatuvilmattum	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+mattum]cl.rest
marafkalYukkunatuvilo	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+o]cl.intr1
marafkalYukkunatuvilum	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+um]cl.incl1
marafkalYukkunatuvilwAnY	maram]obl+kalY]plur+ukku]dat+natu]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukko	maram]obl+kalY]plur+ukku]dat+o]cl.intr1
marafkalYukkuppinYkUta	maram]obl+kalY]plur+ukku]dat+pinY+kUta]cl.incl2
marafkalYukkuppinYmattum	maram]obl+kalY]plur+ukku]dat+pinY+mattum]cl.rest
marafkalYukkuppinYwAnY	maram]obl+kalY]plur+ukku]dat+pinY+wAnY]cl.emph2
marafkalYukkuppinYA	maram]obl+kalY]plur+ukku]dat+pinY]dat.adv+A]cl.intr2
marafkalYukkuppinYAvawu	maram]obl+kalY]plur+ukku]dat+pinY]dat.adv+Avawu]cl.min
marafkalYukkuppinYe	maram]obl+kalY]plur+ukku]dat+pinY]dat.adv+e]cl.emph1
marafkalYukkuppinYo	maram]obl+kalY]plur+ukku]dat+pinY]dat.adv+o]cl.intr1
marafkalYukkuppinYum	maram]obl+kalY]plur+ukku]dat+pinY]dat.adv+um]cl.incl1
marafkalYukkuppinYnYAlA	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+A]cl.intr2
marafkalYukkuppinYnYAlAvawu	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+Avawu]cl.min
marafkalYukkuppinYnYAle	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+e]cl.emph1
marafkalYukkuppinYnYAlkUta	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+kUta]cl.incl2
marafkalYukkuppinYnYAlmattum	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+mattum]cl.rest
marafkalYukkuppinYnYAlo	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+o]cl.intr1
marafkalYukkuppinYnYAlum	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+um]cl.incl1
marafkalYukkuppinYnYAlwAnY	maram]obl+kalY]plur+ukku]dat+pinYnYAl]dat.adv+wAnY]cl.emph2
marafkalYukkuppinYpA	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+A]cl.intr2
marafkalYukkuppinYpAvawu	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+Avawu]cl.min
marafkalYukkuppinYpe	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+e]cl.emph1
marafkalYukkuppinYpukkUta	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+kUta]cl.incl2
marafkalYukkuppinYpumattum	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+mattum]cl.rest
marafkalYukkuppinYpo	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+o]cl.intr1
marafkalYukkuppinYpum	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+um]cl.incl1
marafkalYukkuppinYpuwAnY	maram]obl+kalY]plur+ukku]dat+pinYpu]dat.adv+wAnY]cl.emph2
marafkalYukkuppinwiyA	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+A]cl.intr2
marafkalYukkuppinwiyAvawu	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+Avawu]cl.min
marafkalYukkuppinwiye	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+e]cl.emph1
marafkalYukkuppinwikkUta	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+kUta]cl.incl2
marafkalYukkuppinwimattum	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+mattum]cl.rest
marafkalYukkuppinwiyo	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+o]cl.intr1
marafkalYukkuppinwiyum	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+um]cl.incl1
marafkalYukkuppinwiwAnY	maram]obl+kalY]plur+ukku]dat+pinwi]dat.adv+wAnY]cl.emph2
marafkalYukkulYA	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+A]cl.intr2
marafkalYukkulYAvawu	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+Avawu]cl.min
marafkalYukkulYe	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+e]cl.emph1
marafkalYukkulYkUta	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+kUta]cl.incl2
marafkalYukkulYmattum	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+mattum]cl.rest
marafkalYukkulYo	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+o]cl.intr1
marafkalYukkulYum	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+um]cl.incl1
marafkalYukkulYwAnY	maram]obl+kalY]plur+ukku]dat+ulY]dat.adv+wAnY]cl.emph2
marafkalYukkum	maram]obl+kalY]plur+ukku]dat+um]cl.incl1
marafkalYukkuvatakkilA	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+A]cl.intr2
marafkalYukkuvatakkilAvawu	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+Avawu]cl.min
marafkalYukkuvatakkile	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+e]cl.emph1
marafkalYukkuvatakkilkUta	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkuvatakkilmattum	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+mattum]cl.rest
marafkalYukkuvatakkilo	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+o]cl.intr1
marafkalYukkuvatakkilum	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+um]cl.incl1
marafkalYukkuvatakkilwAnY	maram]obl+kalY]plur+ukku]dat+vatakku]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkuveVlYiyilA	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+A]cl.intr2
marafkalYukkuveVlYiyilAvawu	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+Avawu]cl.min
marafkalYukkuveVlYiyile	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+e]cl.emph1
marafkalYukkuveVlYiyilkUta	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+kUta]cl.incl2
marafkalYukkuveVlYiyilmattum	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+mattum]cl.rest
marafkalYukkuveVlYiyilo	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+o]cl.intr1
marafkalYukkuveVlYiyilum	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+um]cl.incl1
marafkalYukkuveVlYiyilwAnY	maram]obl+kalY]plur+ukku]dat+veVlYi]dat.adv+il]loc+wAnY]cl.emph2
marafkalYukkuwAnY	maram]obl+kalY]plur+ukku] dat+wAnY]cl.emph2
marafkalYukkuwweVrYkilA	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+A]cl.intr2
marafkalYukkuwweVrYkilAvawu	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+Avawu]cl.min
marafkalYukkuwweVrYkile	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+e]cl.emph1

mara fkalYukkuwweVrYkilkUta	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+kUta]cl.incl2
mara fkalYukkuwweVrYkilmattum	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+mattum]cl.rest
marafkalYukkuwweVrYkilo	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+o]cl.intr1
mara fkalYukkuwweVrYkilum	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+um]cl.incl1
marafkalYukkuwweVrYkilwAnY	maram]obl+kalY]plur+ukku]dat+weVrYku]dat.adv+il]loc+wAnY]cl.emph2
marafkalYum	maram]obl+kalY]plur+um]cl.incl1
mara fkal YutEyavA	maram]obl+kalY]plur+utEya]gen+A]cl.intr2
mara fkalYutEyavA vawu	maram]obl+kalY]plur+utEya]gen+Avawu]cl.min
marafkalY utEyave	maram]obl+kalY]plur+utEya]gen+e]cl.emph1
marafkalYutEyakUta	maram]obl+kalY]plur+utEya]gen+kUta]cl.incl2
marafkalYutEyamattum	maram]obl+kalY]plur+utEya]gen+mattum]cl.rest
mara fkalYutEyavo	maram]obl+kalY]plur+utEya]gen+o]cl.intr1
mara fkalYutEyavum	maram]obl+kalY]plur+utEya]gen+um]cl.incl1
mara fkalYutEyawAnY	maram]obl+ kalY]plur+utEya]gen+wAnY] clemph2
marafkalYutanYA	maram]obl+kalY]plur+utanY]soc+A]cl.intr2
marafkalYutanYAvawu	maram]obl+ kalY]plur+utanY] soc+Avawu]cl.min
marafkalYutanYe	maram]obl+kalY]plur+utanY]soc+e]cl.emph1
marafkalYutanYkUta	maram]obl+kalY]plur+utanY]soc+kUta]cl.incl2
mara fkalYutan Ymattum	maram]obl+kalY]plur+utanY]soc+mattum]cl.rest
marafkalYutanYo	maram]obl+kalY]plur+utanY]soc+o]cl.intr1
mara fkalYutan Yum	maram]obl+kalY]plur+utanY]soc+um]cl.incl1
mara fkalYutan YwAnY	maram]obl+kalY]plur+utanY]soc+wAnY]cl.emph2
marafkalYvarEyA	maram]obl+kalY]plur+varE]obl.adv+A]cl.intr2
mara fkalYvarEyA vawu	maram]obl+kalY]plur+varE]obl.adv+Avawu]cl.min
marafkalYvarEye	maram]obl+kalY]plur+varE]obl.adv+e]cl.emph1
mara fkalY varEykU ta	maram]obl+kalY]plur+varE]obl.adv+kUta]cl.incl2
marafkalYvarEymattum	maram]obl+kalY]plur+varE]obl.adv+mattum]cl.rest
mara fkalY varEyo	maram]obl+kalY]plur+varE]obl.adv+o]cl.intr1
mara fkalY varEyum	maram]obl+kalY]plur+varE]obl.adv+um]cl.incl1
marafkalYvarEywAnY	maram]obl+kalY]plur+varE]obl.adv+wAnY]cl.emph2
mara fkal YwAnY	maram]obl+kalY]plur+wAnY]cl.emph2
marawwotA	maram]obl+ otu] soc+A] cl.intr2
marawwotAvawu	maram] obl+otu] soc+Avawu]cl. mm
marawwote	maram]obl+otu]soc+e]cl.emph1
marawwotukkU ta	maram]obl+otu]soc+kUta]cl.incl2
marawwotumattum	maram]obl+ otu] soc+ mattum] cl. rest
marawwoto	maram] obl+otu] soc+o] cl.intr 1
marawwotum	maram] obl+otu] soc+um] cl.incl1
marawwotuwAnY	maram]obl+otu] soc+wAnY]cl.emph2
marawwukkAkavA	maram]obl+ukkAka]ben+A]cl.intr2
marawwukkAkavAvawu	maram]obl+ukkAka]ben+Avawu]cl.min
marawwukkAkave	maram]obl+ukkAka]ben+e]cl.emph1
marawwukkAkakUta	maram]obl+ukkAka]ben+kUta]cl.incl2
marawwukkAkamattum	maram]obl+ukkAka]ben+mattum]cl.rest
marawwukkAkavo	maram]obl+ukkAka]ben+o]cl.intr1
marawwukkAkavum	maram]obl+ukkAka]ben+um]cl.incl1
marawwukkAkawAnY	maram]obl+ukkAka]ben+wAnY]cl.emph2
marawwukkA	maram]obl+ukku]dat+A]cl.intr2
mara wwukkA vawu	maram]obl+ukku]dat+Avawu]cl.min
marawwukkappAlA	maram]obl+ukku]dat+appAl] dat.adv+A] cl. tntr2
mara wwukkappAlA vawu	maram]obl+ukku]dat+appAl]dat.adv+Avawu]cl.min
mara wwukkappAle	maram]obl+ukku]dat+appAl]dat.adv+e]cl.emph1
marawwukkappAlkU ta	maram]obl+ukku]dat+appAl]dat.adv+kUta]cl.incl2
marawwukkappAlmattum	maram]obl+ukku]dat+appAl]dat.adv+mattum]cl.rest
marawwukkappAlo	maram]obl+ukku]dat+appAl]dat.adv+o]cl.intr1
marawwukkappAlum	maram]obl+ukku]dat+appAl]datadv+um]cL.indl
mara wwukkappAlwAnY	maram]obl+ukku]dat+appAl]dat.adv+wAnY]cl.emph2
marawwukkarukilA	maram]obl+ukku]dat+aruk]dat.adv+il]loc+A]cl.intr2
marawwukkarukilAvawu	maram]obl+ukku]dat+aruk]dat.adv+il]loc+Avawu]cl.min
marawwukkarukile	maram]obl+ukku]dat+aruk]dat.adv+il]loc+e]cl.emph1
marawwukkarukilkU ta	maram]obl+ukku]dat+aruk]dat.adv+il]loc+kUta]cl.incl2
marawwukkarukilmattum	maram]obl+ukku]dat+aruk]dat.adv+il]loc+mattum]cl.rest
marawwukkarukilo	maram]obl+ukku]dat+aruk]dat.adv+il]loc+o]cl.intr1
marawwukkarukilum	maram]obl+ukku]dat+aruk]dat.adv+il]loc+um]cl.incl1
marawwukkarukilwAnY	maram]obl+ukku]dat+aruk]dat.adv+il]loc+wAnY]cl.emph2
marawwukkatilA	maram]obl+ukku]dat+ati]dat.adv+il]loc+A]cl.intr2
mara wwukkatilA vawu	maram]obl+ukku]dat+ati]dat.adv+il]loc+Avawu]cl.min
marawwukkatile	maram]obl+ukku]dat+ati]dat.adv+il]loc+e]cl.emph1

marawwukkatiyilmattum	maram]obl+ukku]dat+ati]dat.adv+il]loc+kUta]cl.incl2
marawwukkatiyilo	maram]obl+ukku]dat+ati]dat.adv+il]loc+mattum]cl.rest
marawwukkatiyilum	maram]obl+ukku]dat+ati]dat.adv+il]loc+o]cl.intr1
marawwukkatiyilwAnY	maram]obl+ukku]dat+ati]dat.adv+il]loc+um]cl.incl1
marawwukkAvawu	maram]obl+ukku]dat+ati] dat.adv+il] loc+wAnY] cl. emph2
marawwukke	maram]obl+ukku]dat+eVwir]dat.adv+A]cl.intr2
marawwukkeVwirA	maram]obl+ukku]dat+eVwir]dat.adv+Avawu]cl.min
marawwukkeVwirAvawu	maram]obl+ukku]dat+eVwir]dat.adv+e]cl.emph1
marawwukkeVwirilkUta	maram]obl+ukku]dat+eVwir]dat.adv+o]cl.intr1
marawwukkeVwirilmattum	maram]obl+ukku]dat+eVwir]dat.adv+um]cl.incl1
marawwukkeVwirilwAnY	maram]obl+ukku]dat+eVwir]dat.adv]dat.adv+il]loc+kUta]cl.incl2
marawwukkeVwire	maram]obl+ukku]dat+eVwir]dat.adv]dat.adv+il]loc+mattum]cl.rest
marawwukkeVwiro	maram]obl+ukku]dat+eVwir]dat.adv]dat.adv+il]loc+wAnY]cl.emph2
marawwukkeVwirum	maram]obl+ukku]dat+e]cl.emph1
marawwukkitEyA	maram]obl+ukku]dat+itE+A]cl.intr2
marawwukkitEyAvawu	maram]obl+ukku]dat+itE+Avawu]cl.min
marawwukkitEye	maram]obl+ukku]dat+itE+e]cl.emph1
marawwukkitEkkUta	maram]obl+ukku]dat+itE+kUta]cl.incl2
marawwukkitEmattum	maram]obl+ukku]dat+itE+mattum]cl.rest
marawwukkitEyo	maram]obl+ukku]dat+itE+o]cl.intr1
marawwukkitEyum	maram]obl+ukku]dat+itE+um]cl.incl1
marawwukkitEwAnY	maram]obl+ukku]dat+itE+wAnY]cl.emph2
marawwukkukkilYYakkilA	maram]obl+ukku]dat+kUta]cl.incl2
raarawwukkukkilYYakkilAvawu	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+A]cl.intr2
marawwukkukkilYYakkile	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+Avawu]cl.min
marawwukkukkilYYakkilkUta	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+e]cl.emph1
marawwukkukkilYYakkilmattum	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+kUta]cl.incl2
marawwukkukkilYYakkilo	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+mattum]cl.rest
marawwukkukkilYYakkilum	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+o]cl.intr1
marawwukkukkilYYakkilwAnY	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+um]cl.incl1
marawwukkukkUta	maram]obl+ukku]dat+kilYYakku]dat.adv+il]loc+wAnY]cl.emph2
marawwukkumattum	maram]obl+ukku]dat+mattum]cl.rest
marawwukkumawwiyilA	maram] obl+ukku]dat+mawwi]dat.adv+il]loc+A]cl. intr2
marawwukkumawwiyilAvawu	maram] obl+ukku]dat+mawwi] dat. adv+il] loc+Avawu]cl. min
marawwukkumawwiyile	maram]obl+ukku]dat+mawwi]dat.adv+il]loc+e]cl.emph1
marawwukkumawwiyilkUta	maram]obl+ukku]dat+mawwi]dat.adv+il]loc+kUta]cl.incl2
marawwukkumawwiyilmattum	maram]obl+ukku]dat+mawwi]dat.adv+il]loc+mattum]cl.rest
marawwukkumawwiyilo	maram]obl+ukku]dat+mawwi]dat.adv+il]loc+o]cl.intr1
marawwukkumawwiyilum	maram]obl+ukku]dat+mawwi]dat.adv+il]loc+um]cl.incl1
marawwukkumawwiyilwAnY	maram]obl+ukku] dat+mawwi]dat.adv+il] loc+wAnY] cl. emph2
marawwukkumelA	maram]obl+ukku]dat+mel]dat.adv+A]cl.intr2
marawwukkumelAvawu	maram]obl+ukku]dat+mel]dat.adv+Avawu]cl.min
marawwukkumele	maram] obl+ukku]dat+mel]dat.adv+e]cl. emph1
marawwukkumelkUta	maram]obl+ukku]dat+mel]dat.adv+kUta]cl.incl2
marawwukkumelmattum	maram] obl+ukku] dat+mel] dat. adv+mattum]cl. rest
marawwukkumelo	maram] obl+ukku]dat+mel]dat.adv+o]cl.intr1
marawwukkumelum	maram]obl+ukku]dat+mel]dat.adv+um]cl.incl1
marawwukkumelwAnY	maram]obl+ukku]dat+mel]dat.adv+wAnY]cl.emph2
marawwukkumerYkilA	maram]obl+ukku]dat+merYku]dat.adv+il]loc+A]cl.intr2
marawwukkumerYkilAvawu	maram]obl+ukku]dat+merYku]dat.adv+il]loc+Avawu]cl.min
marawwukkumerYkile	maram] obl+ukku]dat+merYku]dat.adv+il]loc+e]cl. emph1
marawwukkumerYkilkUta	maram]obl+ukku]dat+merYku]dat.adv+il]loc+kUta]cl.incl2
marawwukkumerYkilmattum	maram]obl+ukku]dat+merYku]dat.adv+il]loc+mattum]cl.rest
marawwukkumerYkilo	maram]obl+ukku]dat+merYku]dat.adv+il]loc+o]cl.intr1
marawwukkumerYkilum	maram]obl+ukku]dat+merYku]dat.adv+il]loc+um]cl.incl1
marawwukkumerYkilwAnY	maram]obl+ukku]dat+merYku]dat.adv+il]loc+wAnY]cl.emph2
marawwukkumunwiyA	maram]obl+ukku]dat+munY]dat.adv+A]cl.intr2
marawwukkumunwiyAvawu	maram]obl+ukku]dat+munY]dat.adv+Avawu]cl.min
marawwukkumunwiye	maram]obl+ukku]dat+munY]dat.adv+e]cl.emph1
marawwukkumunwikkUta	maram]obl+ukku]dat+munY]dat.adv+kUta]cl.incl2
marawwukkumunwimattum	maram]obl+ukku]dat+munY]dat.adv+mattum]cl.rest
marawwukkumunwiyo	maram]obl+ukku]dat+munY]dat.adv+o]cl.intr1
marawwukkumunwiyum	maram]obl+ukku]dat+munY]dat.adv+um]cl.incl1
marawwukkumunwiwAnY	maram] obl+ukku]dat+munY]dat.adv+wAnY]cl.emph2
marawwukkumunYnYA	maram]obl+ukku]dat+munYnYAl]dat.adv+A]cl.intr2
marawwukkumunYnYAvawu	maram]obl+ukku]dat+munYnYAl]dat.adv+Avawu]cl.min
marawwukkumunYnYe	maram]obl+ukku]dat+munYnYAl]dat.adv+e]cl.emph1
marawwukkumunYkUta	maram]obl+ukku]dat+munYnYAl]dat.adv+kUta]cl.incl2

marawwukkumunYmattum	maram]obl+ukku]dat+munYnYAl]dat.adv+mattum]cl.rest
marawwukkumunYnYo	maram]obl+ukku]dat+munYnYAl]daLadv+o]d.intrl
marawwukkumunYnYum	maram]obl+ukku]dat+munYnYAl]dat.adv+um]cl.incl1
marawwukkumunYwAnY	maram]obl+ukku]dat+munYnYAl]dat.adv+wAnY]cl.emph2
marawwukkumunYnYAlA	maram]obl+ukku]dat+munYpu]daLadv+A]cl.intr2
marawwukkumunYnYAlAvawu	maram]obl+ukku]dat+munYpu]dat.adv+Avawu]cl.min
marawwukkumunYnYAle	maram]obl+ukku]dat+munYpu]dat.adv+e]cl.emph1
marawwukkumunYnYAlkUta	maram]obl+ukku]dat+munYpu]dat.adv+kUta]cl.incl2
marawwukkumunYnYAlmattum	maram]obl+ukku]dat+munYpu]dat.adv+mattum]cl.rest
marawwukkumunYnYAlo	maram]obl+ukku]dat+munYpu]dat.adv+o]cl.intr1
marawwukkumunYnYAlum	maram]obl+ukku]dat+munYpu]dat.adv+um]cl.incl1
marawwukkumunYnYAlwAnY	maram]obl+ukku]dat+munYpu]dat.adv+wAnY]cl.emph2
marawwukkum unYpA	maram]obl+ukku]dat+munwi]dat.adv+A]cl.intr2
marawwukkumunYpAvawu	maram]obl+ukku]dat+munwi]dat.adv+Avawu]cl.min
marawwukkumunYpe	maram]obl+ukku]dat+munwi]dat.adv+e]cl.emph1
marawwukkumunYpukUta	maram]obl+ukku]dat+munwi]dat.adv+kUta]cl.incl2
marawwukkumunYpumattum	maram]obl+ukku]dat+munwi]dat.adv+mattum]cl.rest
marawwukkum unYpo	maram]obl+ukku]dat+munwi]dat.adv+o]cl.intr1
marawwukkumunYpum	maram]obl+ukku]dat+munwi]dat.adv+um]cl.incl1
marawwukkum unYpuwAnY	maram]obl+ukku]dat+munwi]dat.adv+wAnY]cl.emph2
marawwukkunatuvilA	maram]obl+ukku]dat+natu]dat.adv+il]loc+A]cl.intr2
marawwukkunatuvilAvawu	maram]obl+ukku]dat+natu]dat.adv+il]loc+Avawu]cl.min
marawwukkunatuvile	maram]obl+ukku]dat+natu]dat.adv+il]loc+e]cl.emph1
marawwukkunatuvilkUta	maram]obl+ukku]dat+natu]dat.adv+il]loc+kUta]cl.incl2
marawwukkunatuvilmattum	maram]obl+ukku]dat+natu]dat.adv+il]loc+mattum]cl.rest
marawwukkunatuvilo	maram]obl+ukku]dat+natu]dat.adv+il]loc+o]cl.intr1
marawwukkunatuvilum	maram]obl+ukku]dat+natu]dat.adv+il]loc+um]cl.incl1
marawwukkunatuvilwAnY	maram]obl+ukku]dat+natu]dat.adv+il]loc+wAnY]cl.emph2
marawwukko	maram]obl+ukku]dat+o]d.intrl
marawwukkuppinwiyA	maram]obl+ukku]dat+pinY+kUta]cl.incl2
marawwukkuppinwiyAvawu	maram]obl+ukku]dat+pinY+mattum]cl.rest
marawwukkuppinwi ye	maram]obl+ukku]dat+pinY]dat.adv+A]cl.intr2
marawwukkuppinwikkUta	maram]obl+ukku]dat+pinY]dat.adv+Avawu]cl.min
marawwukkuppinwimattum	maram]obl+ukku]dat+pinY]dat.adv+e]cl.emph1
marawwukkuppinwiyo	maram]obl+ukku]dat+pinY]dat.adv+o]cl.intr1
marawwukkuppinwi yum	maram]obl+ukku]dat+pinY]dat.adv+um]cl.incl1
marawwukkuppinwiwAnY	maram]obl+ukku]dat+pinY]dat.adv+wAnY]cl.emph2
marawwukkuppinYnYA	maram]obl+ukku]dat+pinYnYAl]dat.adv+A]cl.intr2
marawwukkuppinYnYAvawu	maram]obl+ukku]dat+pinYnYAl]dat.adv+Avawu]cl.min
marawwukkuppinYnY e	maram]obl+ukku]dat+pinYnYAl]dat.adv+e]cl.emph1
marawwukkuppin YnYo	maram]obl+ukku]dat+pinYnYAl]dat.adv+kUta]cl.incl2
marawwukkuppinYnYum	maram]obl+ukku]dat+pinYnYAl]dat.adv+mattum]cl.rest
marawwukkuppinYwAnY	maram]obl+ukku]dat+pinYnYAl]dat.adv+o]cl.intr1
marawwukkuppinYkUta	maram]obl+ukku]dat+pinYnYAl]dat.adv+um]cl.incl1
marawwukkuppinYmattum	maram]obl+ukku]dat+pinYnYAl]dat.adv+wAnY]cl.emph2
marawwukkuppinYnYAlA	maram]obl+ukku]dat+pinYpu]dat.adv+A]cl.intr2
marawwukkuppinYnYAlAvawu	maram]obl+ukku]dat+pinYpu]dat.adv+Avawu]cl.min
marawwukkuppinYnY Ale	maram]obl+ukku]dat+pinYpu]dat.adv+e]cl.emph1
marawwukkuppinYnYAlkUta	maram]obl+ukku]dat+pinYpu]dat.adv+kUta]cl.incl2
marawwukkuppinYnYAlmattum	maram]obl+ukku]dat+pinYpu]dat.adv+mattum]cl.rest
marawwukkuppinYnYAlo	maram]obl+ukku]dat+pinYpu]dat.adv+o]cl.intr1
marawwukkuppin YnY Alum	maram]obl+ukku]dat+pinYpu]dat.adv+um]cl.incl1
marawwukkuppinYnYAlwAnY	maram]obl+ukku]dat+pinYpu]dat.adv+wAnY]cl.emph2
marawwukkuppin YpA	maram]obl+ukku]dat+pinwi]dat.adv+A]cl.intr2
marawwukkuppinYpAvawu	maram]obl+ukku]dat+pinwi]dat.adv+Avawu]cl.min
marawwukkuppin Ype	maram]obl+ukku]dat+pinwi]dat.adv+e]cl.emph1
mara wwukkuppinYpukUta	maram]obl+ukku]dat+pinwi]dat.adv+kUta]cl.ind2
marawwukkuppinYpumattum	maram]obl+ukku]dat+pinwi]dat.adv+mattum]cl.rest
marawwukkuppin Ypo	maram]obl+ukku]dat+pinwi]dat.adv+o]cl.intr1
marawwukkuppin Ypum	maram]obl+ukku]dat+pinwi]dat.adv+um]cl.incl1
marawwukkuppinYpuwAnY	maram]obl+ukku]dat+pinwi]dat.adv+wAnY]cl.emph2
marawwukkulYA	maram]obl+ukku]dat+ulY]dat.adv+A]d.intr2
marawwukkulYAvawu	maram]obl+ukku]dat+ulY]dat.adv+Avawu]cl.min
marawwukkulYe	maram]obl+ukku]dat+ulY]dat.adv+e]cl.emph1
marawwukkulYkUta	maram]obl+ukku]dat+ulY]dat.adv+kUta]cl.incl2
marawwukkulYmattum	maram]obl+ukku]dat+ulY]dat.adv+mattum]cl.rest
marawwukkulYo	maram]obl+ukku]dat+ulY]dat.adv+o]cl.intr1
marawwukkulYum	maram]obl+ukku)dat+ulYldat.adv+um]d.indl

marawwukkulYwAnY	maram]obl+ukku]dat+ulY]dat.adv+wAnY]cl.emph2
marawwukkum	maram]obl+ukku]dat+um]cl.incl1
marawwukkuvatakkilA	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+A]cl.intr2
marawwukkuvatakkilAvawu	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+Avawu]cl.min
marawwukkuvatakkile	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+e]cl.emph1
marawwukkuvatakkilkUta	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+kUta]cl.incl2
marawwukkuvatakkilmattum	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+mattum]cl.rest
marawwukkuvatakkilo	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+o]cl.intr1
marawwukkuvatakkilum	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+um]cl.incl1
marawwukkuvatakkilwAnY	maram]obl+ukku]dat+vatakku]dat.adv+il]loc+wAnY]cl.emph2
marawwukkuveVlYiyilA	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++A]cl.intr2
marawwukkuveVlYiyilAvawu	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++Avawu]cl.min
marawwukkuveVlYiyile	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++e]cl.emph1
marawwukkuveVlYiyilkUta	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++kUta]cl.incl2
marawwukkuveVlYiyilmattum	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++mattum]cl.rest
marawwukkuveVlYiyilo	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++o]cl.intr1
marawwukkuveVlYiyilum	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++um]cl.incl1
marawwukkuveVlYiyilwAnY	maram]obl+ukku]dat+veVlYi]dat.adv+il]loc++wAnY]cl.emph2
marawwukkuwAnY	maram]obl+ukku]dat+wAnY]cl.emph2
marawwukkuweVrYkilA	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+A]cl.intr2
marawwukkuweVrYkilAvawu	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+Avawu]cl.min
marawwukkuweVrYkile	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+e]cl.emph1
marawwukkuweVrYkilkUta	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+kUta]cl.incl2
marawwukkuweVrYkilmattum	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+mattum]cl.rest
marawwukkuweVrYkilo	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+o]cl.intr1
marawwukkuweVrYkilum	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+um]cl.incl1
marawwukkuweVrYkilwAnY	maram]obl+ukku]dat+weVrYku]dat.adv+il]loc+wAnY]cl.emph2
marawwutanYA	maram]obl+utanY] soc+A]cl.intr2
marawwutanYAvawu	maram]obl+utanY]soc+Avawu]cl.min
marawwutanYe	maram]obl+utanY]soc+e]cl.emph1
marawwutanYkUla	maram]obl+ utanY] soc+kUta]cl.incl2
marawwutanYmattum	maram]obl+utanY]soc+mattum]cl.rest
marawwutanYo	maram]obl+utanY]soc+o]cl.intr1
marawwutanYum	maram]obl+utanY]soc+um]cl.incl1
marawwutanYwAnY	maram]obl+utanY] soc+wAnY]cl. em

Appendix IV — b
List of Inflectional forms for the Pronoun *'nAnV*

eVnY	eVnY]obl1
eVnYakkAkavAvawu	eVnY]obl1+akkAka]ben+Avawu]cl.min
eVnYakkAkakUta	eVnY]obl1+akkAka]ben+kUta]cl.incl2
eVnYakkAkamattum	eVnY]obl1+akkAka]ben+mattum]cl.rest
eVnYakkAkavo	eVnY]obl1+akkAka]ben+o]cl.intr1
eVnYakkAkavum	eVnY]obl1+akkAka]ben+um]cl.incl1
eVnYakkAkawAnY	eVnY]obl1+akkAka]ben+wAnY]cl.emph2
eVnYakkA	eVnY]obl1+akku]dat+A]cl.intr2
eVnYakkAnYawA	eVnY]obl1+ akku]dat+AnYa]adv+awu]euph+A]cl.intr2
eVnYakkAnYawAvawu	eVnY]obl1+akku]dat+AnYa]adv+awu]euph+Avawu]euph+]cl.min
eVnYakkAnYawe	eVnY]obl1+akku]dat+AnYa]adv+awu]euph+e]cl.emph1
eVnYakkAnYawukkUta	eVnY]obl1+akku]dat+AnYa]adv+awu]euph+kUta]cl.incl2
eVnYakkAnYawo	eVnY]obl1+akku]dat+AnYa]adv+awu]euph+o]cl.intr1
eVnYakkAnYawumattum	eVnY]obl1+akku]dat+AnYa]adv+awu]euph+u+mattum]cl.rest
eVnYakkAnYawuwAnY	eVnY]obl1+akku]dat+AnYa]adv+awu]euph+u+wAnY]cl.emph2
eVnYakkAvawu	eVnY]obl1+akku]dat+Avawu]cl.min
eVnYakkarukilA	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+A]cl.intr2
eVnYakkarukilAvawu	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+Avawu]cl.min
eVnYakkarukile	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+e]cl.emph1
eVnYakkarukilkUta	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+kUta]cl.incl2
eVnYakkarukilmattum	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+mattum]cl.rest
eVnYakkarukilo	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+o]cl.intr1
eVnYakkarukilum	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+um]cl.incl1
eVnYakkarukilwAnY	eVnY]obl1+akku]dat+aruk]dat.adv+il]loc+wAnY]cl.emph2
eVnYakkeVwirA	eVnY]obl1+akku]dat+eVwir]dat.adv+A]cl.intr2
eVnYakkeVwirAvawu	eVnY]obl1+akku]dat+eVwir]dat.adv+Avawu]cl.min
eVnYakkeVwire	eVnY]obl1+akku]dat+eVwir]dat.adv+e]cl.emph1
eVnYakkeVwirilkUta	eVnY]obl1+akku]dat+eVwir]dat.adv+il]loc+kUta]cl.incl2
eVnYakkeVwirilmattum	eVnY]obl1+akku]dat+eVwir]dat.adv+il]loc+mattum]cl.rest
eVnYakkeVwirilwAnY	eVnY]obl1+akku]dat+eVwir]dat.adv+il]loc+wAnY]cl.emph2
eVnYakkeVwiro	eVnY]obl1+akku]dat+eVwir]dat.adv+o]cl.intr1
eVnYakkeVwirum	eVnY]obl1+akku]dat+eVwir]dat.adv+um]cl.incl1
cVnYakkc	eVnY]obl1+ akku]dat+e]cl.emph1
eVnYakkitEyA	eVnY]obl1+akku]dat+itE]dat.adv+A]cl.intr2
eVnYakkitEyAvawu	eVnY]obl1+akku]dat+itE]dat.adv+Avawu]cl.min
eVnYakkitEye	eVnY]obl1+akku]dat+itE]dat.adv+e]cl.emph1
eVnYakkitEkkUta	eVnY]obl1+akku]dat+itE]dat.adv+kUta]cl.incl2
eVnYakkitEmattum	eVnY]obl1+akku]dat+itE]dat.adv+mattum]cl.rest
eVnYakkitEyo	eVnY]obl1+akku]dat+itE]dat.adv+o]cl.intr1
eVnYakkitEyum	eVnY]obl1+akku]dat+itE]dat.adv+um]cl.incl1
eVnYakkitEwAnY	eVnY]obl1+akku]dat+itE]dat.adv+wAnY]cl.emph2
eVnYakkukkUta	cVnY]obl1+akku]dat+kUta]cl.incl2
eVnYakkukkilYYakkilA	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+A]cl.intr2
eVnYakkukkilYYakkilAvawu	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+Avawu]cl.min
eVnYakkukkilYYakkile	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+e]cl.emph1
eVnYakkukkilYYakkilkUla	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+kUta]cl.incl2
eVnYakkukkilYYakkilmattum	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+mattum]cl. rest
eVnYakkukkilYYakkilo	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+o]cl.intr1
eVnYakkukkilYYakkilum	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+um]cl.incl1
eVnYakkukkilYYakkilwAnY	eVnY]obl1+akku]dat+kilYYakku]dat.adv+il]loc+wAnY]cl.emph2
eVnYakkumattum	eVnYJobll+akku]dat+mattum]cl.rest
eVnYakkumelA	eVnY]obl1+akku]dat+mel]dat.adv+A]cl.intr2
eVnYakkumelAvawu	eVnY]obl1+akku]dat+mel]dat.adv+Avawu]cl.min
eVnYakkumele	eVnY]obl1+akku]dat+mel]dat.adv+e]cl.emph1
eVnYakkumelkUta	eVnY]obl1+akku]dat+mel]dat.adv+kUta]cl.incl2
eVnYakkumelmattum	eVnY]obl1+akku]dat+mel]dat.adv+mattum]cl.rest
eVnYakkumelo	eVnYJobll+akku]dat+mel]dat.adv+o]cl.intr1
eVnYakkumelum	eVnY]obl1+akku]dat+mel]dat.adv+um]cl.incl1
eVnYakkumelwAnY	eVnY]obl1+akku]dat+mel]dat.adv+wAnY]cl.emph2
eVnYakkumerYkilA	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+A]cl.intr2
eVnYakkumerYkilAvawu	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+Avawu]cl.min
eVnYakkumerYkile	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+e]cl.emph1
eVnYakkumerYkilkUta	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+kUta]cl.incl2

eVnYakkumerYkilmattum	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+mattum]cl.rest
eVnYakkumerYkilo	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+o]cl.intr1
eVnYakkumerYkilum	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+um]cl.incl1
eVnYakkumerYkilwAnY	eVnY]obl1+akku]dat+merYku]dat.adv+il]loc+wAnY]cl.emph2
eVnYakkumunYnYA	eVnY]obl1+akku]dat+munY]dat.adv+A]cl.intr2
eVnYakkumunYnYAvawu	eVnY]obl1+akku]dat+munY]dat.adv+Avawu]cl.min
eVnYakkumunYnYe	eVnY]obl1+akku]dat+munY]dat.adv+e]cl.emph1
eVnYakkumunYkUta	eVnY]obl1+akku]dat+munY]dat.adv+kUta]cl.incl2
eVnYakkumunYmattum	eVnY]obl1+akku]dat+munY]dat.adv+mattum]cl.rest
eVnYakkumunYnYo	eVnY]obl1+akku]dat+munY]dat.adv+o]cl.intr1
eVnYakkumunYnYum	eVnY]obl1+akku]dat+munY]dat.adv+um]cl.incl1
eVnYakkumunYwAnY	eVnY]obl1+akku]dat+munY]dat.adv+wAnY]cl.emph2
eVnYakkumunYnYAlA	eVnY]obl1+akku]dat+munYnYAl]dat.adv+A]cl.intr2
eVnYakkumunYnYAlAvawu	eVnY]obl1+akku]dat+munYnYAl]dat.adv+Avawu]cl.min
eVnYakkumunYnYAle	eVnY]obl1+akku]dat+munYnYAl]dat.adv+e]cl.emph1
eVnYakkumunYnYAlkUta	eVnY]obl1+akku]dat+munYnYAl]dat.adv+kUta]cl.incl2
eVnYakkumunYnYAlmattum	eVnY]obl1+akku]dat+munYnYAl]dat.adv+mattum]cl.rest
eVnYakkumunYnYAlo	eVnY]obl1+akku]dat+munYnYAl]dat.adv+o]cl.intr1
eVnYakkumunYnYAlum	eVnY]obl1+akku]dat+munYnYAl]dat.adv+um]cl.incl1
eVnYakkumunYnYAlwAnY	eVnY]obl1+akku]dat+munYnYAl]dat.adv+wAnY]cl.emph2
eVnYakkumunYpA	eVnY]obl1+akku]dat+munYpu]dat.adv+A]cl.intr2
eVnYakkumunYpAvawu	eVnY]obl1+akku]dat+munYpu]dat.adv+Avawu]cl.min
eVnYakkumunYpe	eVnY]obl1+akku]dat+munYpu]dat.adv+e]cl.emph1
eVnYakkumunYpukUta	eVnY]obl1+akku]dat+munYpu]dat.adv+kUta]cl.incl2
eVnYakkumunYpumattum	eVnY]obl1+akku]dat+munYpu]dat.adv+mattum]cl.rest
eVnYakkumunYpo	eVnY]obl1+akku]dat+munYpu]dat.adv+o]cl.intr1
eVnYakkumunYpum	eVnY]obl1+akku]dat+munYpu]dat.adv+um]cl.incl1
eVnYakkumunYpuwAnY	eVnY]obl1+akku]dat+munYpu]dat.adv+wAnY]cl.emph2
eVnYakkumunwiyA	eVnY]obl1+akku]dat+munwi]dat.adv+A]cl.intr2
eVnYakkumunwiyAvawu	eVnY]obl1+akku]dat+munwi]dat.adv+Avawu]cl.min
eVnYakkumunwiye	eVnY]obl1+akku]dat+munwi]dat.adv+e]cl.emph1
eVnYakkumunwikkUta	eVnY]obl1+akku]dat+munwi]dat.adv+kUta]cl.incl2
eVnYakkumunwimattum	eVnY]obl1+akku]dat+munwi]dat.adv+mattum]cl.rest
eVnYakkumunwiyo	eVnY]obl1+akku]dat+munwi]dat.adv+o]cl.intr1
eVnYakkumunwiyum	eVnY]obl1+akku]dat+munwi]dat.adv+um]cl.incl1
eVnYakkumunwiwAnY	eVnY]obl1+akku]dat+munwi]dat.adv+wAnY]cl.emph2
eVnYakkunatuvilA	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+A]cl.intr2
eVnYakkunatuvilAvawu	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+Avawu]cl.min
eVnYakkunatuvile	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+e]cl.emph1
eVnYakkunatuvilkUta	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+kUta]cl.incl2
eVnYakkunatuvilmattum	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+mattum]cl.rest
eVnYakkunatuvilo	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+ o]cl.intr1
eVnYakkunatuvilum	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+um]cl.incl1
eVnYakkunatuvilwAnY	eVnY]obl1+akku]dat+natu]dat.adv+il]loc+wAnY]cl.emph2
eVnYakko	eVnY]obl1+akku]dat+o]cl.intr1
eVnYakkuppinYnYA	eVnY]obl1+akku]dat+pinY]dat.adv+A]cl.intr2
eVnYakkuppinYnYAvawu	eVnY]obl1+akku]dat+pinY]dat.adv+Avawu]cl.min
eVnYakkuppinYnYe	eVnY]obl1+akku]dat+pinY]dat.adv+e]cl.emph1
eVnYakkuppinYkUta	eVnY]obl1+akku]dat+pinY]dat.adv+kUta]cl.incl2
eVnYakkuppinYmattum	eVnY]obl1+akku]dat+pinY]dat.adv+mattum]cl.rest
eVnYakkuppinYnYo	eVnY]obl1+akku]dat+pinY]dat.adv+o]cl.intr1
eVnYakkuppinYnYum	eVnY]obl1+akku]dat+pinY]dat.adv+um]cl.incl1
eVnYakkuppinYwAnY	eVnY]obl1+akku]dat+pinY]dat.adv+wAnY]cl.emph2
eVnYakkuppinYnYAlA	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+A]cl.intr2
eVnYakkuppinYnYAlAvawu	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+Avawu]cl.min
eVnYakkuppinYnYAle	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+e]cl.emph1
eVnYakkuppinYnYAlkUta	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+kUta]cl.incl2
eVnYakkuppinYnYAlmattum	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+mattum]cl.rest
eVnYakkuppinYnYAlo	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+o]cl.intr1
eVnYakkuppinYnYAlum	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+um]cl.incl1
eVnYakkuppinYnYAlwAnY	eVnY]obl1+akku]dat+pinYnYAl]dat.adv+wAnY]cl.emph2
eVnYakkuppinYpA	eVnY]obl1+akku]dat+pinYpu]dat.adv+A]cl.intr2
eVnYakkuppinYpAvawu	eVnY]obl1+akku]dat+pinYpu]dat.adv+Avawu]cl.min
eVnYakkuppinYpe	eVnY]obl1+akku]dat+pinYpu]dat.adv+e]cl.emph1
eVnYakkuppinYpukUta	eVnY]obl1+akku]dat+pinYpu]dat.adv+kUta]cl.incl2
eVnYakkuppinYpumattum	eVnY]obl1+akku]dat+pinYpu]dat.adv+mattum]cl.rest
eVnYakkuppinYpo	eVnY]obl1+akku]dat+pinYpu]dat.adv+o]cl.intr1
eVnYakkuppinYpum	eVnY]obl1+akku]dat+pinYpu]dat.adv+um]cl.incl1

eVnYakkupinYpuwAnY	eVnY]obl1+akku]dat+pinYpu]dat.adv+wAnY]cl.emph2
eVnYakkupinwiyA	eVnY]obl1+akku]dat+pinwi]dat.adv+A]cl.intr2
eVnYakkupinwiyAvawu	eVnY]obl1+akku]dat+pinwi]dat.adv+Avawu]cl.min
eVnYakkupinwiye	eVnY]obl1+akku]dat+pinwi]dat.adv+e]cl.emph1
eVnYakkupinwikkUta	eVnY]obl1+akku]dat+pinwi]dat.adv+kUta]cl.incl2
eVnYakkupinwimattum	eVnY]obl1+akku]dat+pinwi]dat.adv+mattum]cl.rest
eVnYakkupinwiyo	cVnY]obll+akku]dat+pinwi]dat.adv+o]cl.intr1
cVnYakkupinwiyum	eVnY]obl1+akku]dat+pinwi]dat.adv+um]cl.incl1
eVnYakkupinwiwAnY	eVnY]obl1+akku]dat+pinwi]dat.adv+wAnY]cl.emph2
eVnYakkulYA	eVnY]obl1+akku]dat+ulY]dat.adv+A]cl.intr2
eVnYakkulYAvawu	eVnY]obl1+akku]dat+ulY]dat.adv+Avawu]cl.min
eVnYakkulYe	eVnY]obl1+akku]dat+ulY]dat.adv+e]cl.emph1
eVnYakkulYkUta	eVnY]obl1+akku]dat+ulY]dat.adv+kUta]cl.incl2
eVnYakkulYmattum	eVnY]obl1+akku]dat+ulY]dat.adv+mattum]cl.rest
eVnYakkulYo	eVnY]obl1+akku]dat+ulY]dat.adv+o]cl.intr1
eVnYakkulYum	eVnY]obl1+akku]dat+ulY]dat.adv+um]cl.incl1
eVnYakkulYwAnY	eVnY]obl1+akku]dat+ulY]dat.adv+wAnY]cl.emph2
eVnYakkum	eVnY]obl1+akku]dat+um]cl.incl1
eVnYakkuriyawA	eVnY]obl1+akku]dat+uriya]dat.pp+A]cl.intr2
eVnYakkuriyawAvawu	eVnY]obl1+akku]dat+uriya]dat.pp+Avawu]cl.min
eVnYakkuriyawe	eVnY]obl1+akku]dat+uriya]dat.pp+e]cl.emph1
eVnY akkuriyawukUta	eVnY]obl1+akku]dat+uriya]dat.pp+kUta]cl.incl2
eVnYakkuriyawumattum	eVnY]obl1+akku]dat+uriya]dat.pp+mattum]cl.rest
eVnYakkuriyawo	eVnY]obl1+akku]dat+uriya]dat.pp+o]cl.intr1
eVnYakkuriyawum	eVnY]obl1+akku]dat+uriya]dat.pp+um]cl.incl1
eVnYakkuriyawuwaAnY	eVnY]obl1+akku]dat+uriya]dat.pp+wAnY]cl.emph2
eVnYakkuvatakkilA	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+A]cl.intr2
eVnYakkuvatakkilAvawu	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+Avawu]cl.min
eVnYakkuvatakkile	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+e]cl.emph1
eVnYakkuvatakkilkUta	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+kUta]cl.incl2
eVnYakkuvatakkilmattum	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+mattum]cl.rest
eVnYakkuvatakkilo	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+o]cl.intr1
eVnYakkuvatakkilum	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+um]cl.incl1
eVnYakkuvatakkilwAnY	eVnY]obl1+akku]dat+vatakku]dat.adv+il]loc+wAnY]cl.emph2
eVnYakkuveVlYiyA	eVnY]obl1+akku]dat+veVlYi]dat.adv+A]cl.intr2
eVnYakkuveVlYiyAvawu	eVnY]obl1+akku]dat+veVlYi]dat.adv+Avawu]cl.min
eVnYakkuveVlYiye	eVnY]obl1+akku]dat+veVlYi]dat.adv+e]cl.emph1
eVnYakkuveVlYikUta	eVnY]obl1+akku]dat+veVlYi]dat.adv+kUta]cl.incl2
eVnYakkuveVlYimattum	eVnY]obl1+akku]dat+veVlYi]dat.adv+mattum]cl.rest
eVnYakkuveVlYiyo	eVnY]obl1 +akku]dat+veVlYi]dat.adv+o]cl.intr1
eVnYakkuveVlYiyum	eVnY]obl1+akku]dat+veVlYi]dat.adv+um]cl.incl1
eVnYakkuveVlYiwAnY	eVnY]obl1+akku]dat+veVlYi]dat.adv+wAnY]cl.emph2
eVnYakkuveVlYiyilA	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+A]cl.intr2
eVnYakkuveVlYiyilAvawu	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+Avawu]cl.min
eVnYakkuveVlYiyile	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+e]cl.emph1
eVnYakkuveVlYiyilkUta	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+kUta]cl.incl2
eVnYakkuveVlYiyilmattum	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+mattum]cl.rest
eVnYakkuveVlYiyilo	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+o]cl.intr1
eVnYakkuveVlYiyilyum	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+um]cl.incl1
eVnYakkuveVlYiyilwAnY	eVnY]obl1+akku]dat+veVlYi]dat.adv+il]loc+wAnY]cl.emph2
eVnYakkuwAnY	eVnY]obl1 +akku]dat+wAnY]cl.emph2
eVnYakkuwweVrYkilA	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+A]cl.intr2
eVnYakkuwweVrYkilAvawu	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+Avawu]cl.min
eVnYakkuwweVrYkile	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+e]cl.emph1
eVnYakkuwweVrYkilkUta	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+kUta]cl.incl2
eVnYakkuwweVrYkilmattum	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+mattum]cl.rest
eVnYakkuwweVrYkilo	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+o]cl.intr1
eVnYakkuwweVrYkilum	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+um]cl.incl1
eVnYakkuwweVrYkilwAnY	eVnY]obl1+akku]dat+weVrYku]dat.adv+il]loc+wAnY]cl.emph2
eVnYawu	eVnY]obl1+awu]gen
eVnYkUta	eVnY]obl1+kUta]cl.incl2
eVnYkitteyA	eVnY]obl1+kitte]nom.adv+A]cl.intr2
eVnYkitteyAvawu	eVnY]obl1+kitte]nom.adv+Avawu]cl.min
eVnYkitteye	eVnY]obl1+kitte]nom.adv+e]cl.emph1
eVnYkittekkUta	eVnY]obl1+kitte]nom.adv+kUta]cl.incl2
eVnYkittemattum	eVnY]obl1+kitte]nom.adv+mattum]cl.rest
eVnYkitteyo	eVnY]obl1+kitte]nom.adv+o]cl.intr1
eVnYkitteyum	eVnY]obl1+kitte]nom.adv+um]cl.incl1

eVnYkittewAnY	eVnY]obl1+kitte]nom.adv+wAnY]cl.emph2
eVnYmAwiriyA	eVnY]obl1+mAwiri]nom.pl+A]cl.intr2
eVnYmAwiriyAvawu	eVnY]obl1+mAwiri]nom.pl+Avawu]cl.min
eVnYmAwiriye	eVnY]obl1+mAwiri]nom.pl+e]cl.emph1
eVnYmAwirikkUta	eVnY]obl1+mAwiri]nom.pl+kUta]cl.incl2
eVnYmAwirimattum	eVnY]obl1+mAwiri]nom.pl+mattum]cl.rest
eVnYmAwiriyo	eVnY]obl1+mAwiri]nom.pl+o]cl.intr1
eVnYmAwiriyum	eVnY]obl1+mAwiri]nom.pl+um]cl.incl1
eVnYmAwiriwAnY	eVnY]obl1+mAwiri]nom.pl+wAnY]cl.emph2
eVnYmUlamA	eVnY]obl1+mUlam]nom.pp+A]cl.intr2
eVnYmUlamAvawu	eVnY]obl1+mUlam]nom.pp+Avawu]cl.min
eVnYmUlame	eVnY]obl1+mUlam]nom.pp+e]cl.emph1
eVnYmUlamkUta	eVnY]obl1+mUlam]nom.pp+kUta]cl.incl2
eVnYmUlammattum	eVnY]obl1+mUlam]nom.pp+mattum]cl.rest
eVnYmUlamo	eVnY]obl1+mUlam]nom.pp+o]cl.intr1
eVnYmUlamum	eVnY]obl1+mUlam]nom.pp+um]cl.incl1
eVnYmUlamwAnY	eVnY]obl1+mUlam]nom.pp+wAnY]cl.emph2
eVnYmattum	eVnY]obl1+mattum]cl.rest
eVnYponYrYavA	eVnY]obl1+ponYrYa]nom.pl+A]cl.intr2
eVnYponYrYaAvawu	eVnY]obl1+ponYrYa]nom.pl+Avawu]cl.min
eVnYponYrYave	eVnY]obl1+ponYrYa]nom.pl+e]cl.emph1
eVnYponYrYavo	eVnY]obl1+ponYrYa]nom.pl+o]cl.intr1
eVnYponYrYavum	eVnY]obl1+ponYrYa]nom.pl+um]cl.incl1
eVnYponYrYukkUta	eVnY]obl1+ponYrYu+kUta]cl.incl2
eVnYponYrYumattum	eVnY]obl1+ponYrYu+mattum]cl.rest
eVnYponYrYuwAnY	eVnY]obl1+ponYrYu+wAnY]cl.emph2
eVnYvarEyA	eVnY]obl1+varE]adv+A]cl.intr2
eVnYvarEyAvawu	eVnY]obl1+varE]adv+Avawu]cl.min
eVnYvarEye	eVnY]obl1+varE]adv+e]cl.emph1
eVnYvarEkkUta	eVnY]obl1+varE]adv+k+kUta]cl.incl2
eVnYvarEmattum	eVnY]obl1+varE]adv+mattum]cl.rest
eVnYvarEyo	eVnY]obl1+varE]adv+o]cl.intr1
eVnYvarEyum	eVnY]obl1+varE]adv+um]cl.incl1
eVnYvarEwAnY	eVnY]obl1+varE]adv+wAnY]cl.emph2
eVnYwAnY	eVnY]obl1+wAnY]cl.emph2
eVnYnYAlA	eVnYnY]obl2+Aljins+A]cl.intr2
eVnYnYAlAvawu	eVnYnY]obl2+Aljins+Avawu]cl.min
eVnYnYAle	eVnYnY]obl2+Aljins+e]cl.emph1
eVnYnYAlkUta	eVnYnY]obl2+Aljins+kUta]cl.incl2
eVnYnYAlmattum	eVnYnY]obl2+Aljins+mattum]cl.rest
eVnYnYAlo	eVnYnY]obl2+Aljins+o]cl.intr1
eVnYnYAlum	eVnYnY]obl2+Aljins+um]cl.incl1
eVnYnYAlwAnY	eVnYnY]obl2+Aljins+wAnY]cl.emph2
eVnYnYEyA	eVnYnY]obl2+E]acc+A]cl.intr2
eVnYnYEyAvawu	eVnYnY]obl2+E]acc+Avawu]cl.min
eVnYnYEccurYrYiyA	eVnYnY]obl2+E]acc+curYrYi]acc.adv+A]cl.intr2
eVnYnYEccurYrYiyAvawu	eVnYnY]obl2+E]acc+curYrYi]acc.adv+Avawu]cl.min
eVnYnYEccurYrYiye	eVnYnY]obl2+E]acc+curYrYi]acc.adv+e]cl.emph1
eVnYnYEccurYrYikkUta	eVnYnY]obl2+E]acc+curYrYi]acc.adv+kUta]cl.incl2
eVnYnYEccurYrYimattum	eVnYnY]obl2+E]acc+curYrYi]acc.adv+mattum]cl.rest
eVnYnYEccurYrYiyo	eVnYnY]obl2+E]acc+curYrYi]acc.adv+o]cl.intr1
eVnYnYEccurYrYiyum	eVnYnY]obl2+E]acc+curYrYi]acc.adv+um]cl.incl1
eVnYnYEccurYrYiwAnY	eVnYnY]obl2+E]acc+curYrYi]acc.adv+wAnY]cl.emph2
eVnYnYEye	eVnYnY]obl2+E]acc+e]cl.emph1
eVnYnYEkkAttilumA	eVnYnY]obl2+E]acc+kAttilum]acc.pp+A]cl.intr2
eVnYnYEkkAttilumAvawu	eVnYnY]obl2+E]acc+kAttilum]acc.pp+Avawu]cl.min
eVnYnYEkkAttilume	eVnYnY]obl2+E]acc+kAttilum]acc.pp+e]cl.emph1
eVnYnYEkkAttilumkUta	eVnYnY]obl2+E]acc+kAttilum]acc.pp+kUta]cl.incl2
eVnYnYEkkAttilummattum	eVnYnY]obl2+E]acc+kAttilum]acc.pp+mattum]cl.rest
eVnYnYEkkAttilumo	eVnYnY]obl2+E]acc+kAttilum]acc.pp+o]cl.intr1
eVnYnYEkkAttilumum	eVnYnY]obl2+E]acc+kAttilum]acc.pp+um]cl.incl1
eVnYnYEkkAttilumwAnY	eVnYnY]obl2+E]acc+kAttilum]acc.pp+wAnY]cl.emph2
eVnYnYEkkUta	eVnYnY]obl2+E]acc+kUta]cl.incl2
eVnYnYEkkuriwwA	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+A]cl.intr2
eVnYnYEkkuriwwAvawu	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+Avawu]cl.min
eVnYnYEkkuriwwe	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+e]cl.emph1
eVnYnYEkkuriwwukkUta	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+kUta]cl.incl2
eVnYnYEkkuriwwumattum	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+mattum]cl.rest

eVnYnYEkkuriwwo	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+o]cl.intr1
eVnYnYEkkuriwwum	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+um]cl.incl1
eVnYnYEkkuriwwuwAnY	eVnYnY]obl2+E]acc+kuriwwu]acc.pp+wAnY]cl.emph2
eVnYnYEmattilumA	eVnYnY]obl2+E]acc+mattilum]acc.pp+A]cl.intr2
eVnYnYEmattilumAvawu	eVnYnY]obl2+E]acc+mattilum]acc.pp+Avawu]cl.min
eVnYnYEmattilume	eVnYnY]obl2+E]acc+mattilum]acc.pp+e]cl.emph1
eVnYnYEmattilumkUta	eVnYnY]obl2+E]acc+mattilum]acc.pp+kUta]cl.incl2
eVnYnYEmattil ummattum	eVnYnY]obl2+E]acc+mattilum]acc.pp+mattum]cl.rest
eVnYnYEmattilumo	eVnYnY]obl2+E]acc+mattilum]acc.pp+o]cl.intr1
e V n Y n YE m a ttil u mu m	eVnYnY]obl2+E]acc+mattilum]acc.pp+um]cl.incl1
eVnYnYEmattilumwAnY	eVnYnY]obl2+E]acc+mattilum]acc.pp+wAnY]cl.emph2
eVnYnYEmattum	eVnYnY]obl2+E]acc+mattum]cl.rest
eVnYnYEyo	eVnYnY]obl2+E]acc+o]cl.intr1
eVnYnYEpparYrYiyA	eVnYnY]obl2+E]acc+parYrYi]acc.pl+A]cl.intr2
eVnYnYEpparYrYiyAvawu	eVnYnY]obl2+E]acc+parYrYi]acc.pl+Avawu]cl.min
eVnYnYEpparYrYiye	eVnYnY]obl2+E]acc+parYrYi]acc.pl+e]cl.emph1
eVnYnYEpparYrYikkUta	eVnYnY]obl2+E]acc+parYrYi]acc.pl+kUta]cl.incl2
eVnYnYEpparYrYimattum	eVnYnY]obl2+E]acc+parYrYi]acc.pl+mattum]cl.rest
eVnYnYEpparYrYiyo	eVnYnY]obl2+E]acc+parYrYi]acc.pl+o]cl.intr1
eVnYnYEpparYrYiyum	eVnYnY]obl2+E]acc+parYrYi]acc.pl+um]cl.incl1
eVnYnYEpparYrYiwAnY	eVnYnY]obl2+E]acc+parYrYi]acc.pl+wAnY]cl.emph2
cVnYnYEppolA	eVnYnY]obl2+E]acc+pol]acc.pl+A]cl.intr2
eVnYnYEppolAvawu	eVnYnY]obl2+E]acc+pol]acc.pl+Avawu]cl.min
eVnYnYEppole	eVnYnY]obl2+E]acc+pol]acc.pl+e]cl.emph1
eVnYnYEppolkUta	eVnYnY]obl2+E]acc+pol]acc.pl+kUta]cl.incl2
eVnYnYEppolmattum	eVnYnY]obl2+E]acc+pol]acc.pl+mattum]cl.rest
eVnYnYEppolo	eVnYnY]obl2+E]acc+pol]acc.pl+o]cl.intr1
eVnYnYEppolum	eVnYnY]obl2+E]acc+pol]acc.pl+um]cl.incl1
eVnYnYEppolwAnY	eVnYnY]obl2+E]acc+pol]acc.pl+wAnY]cl.emph2
eVnYnYEppolavA	eVnYnY]obl2+E]acc+pola]acc.pl+A]cl.intr2
eVnYnYEppolaAvawu	eVnYnY]obl2+E]acc+pola]acc.pl+Avawu]cl.min
eVnYnYEppolave	eVnYnY]obl2+E]acc+pola]acc.pl+e]cl.emph1
eVnYnYEppolakUta	eVnYnY]obl2+E]acc+pola]acc.pl+kUta]cl.incl2
eVnYnYEppolamattum	eVnYnY]obl2+E]acc+pola]acc.pl+mattum]cl.rest
eVnYnYEppolavo	eVnYnY]obl2+E]acc+pola]acc.pl+o]cl.intr1
eVnYnYEppolavum	eVnYnY]obl2+E]acc+pola]acc.pl+um]cl.incl1
eVnYnYEppolawAnY	eVnYnY]obl2+E]acc+pola]acc.pl+wAnY]cl.emph2
eVnYnYEpponYrYaAvawu	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+Avawu]cl.min
eVnYnYEpponYrYakUta	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+kUta]cl.incl2
eVnYnYEpponYrYamattum	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+mattum]cl.rest
eVnYnYEpponYrYavum	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+um]cl.incl1
cVnYnYEpponYrYawA	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+w+A]cl.intr2
eVnYnYEpponYrYawe	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+w+e]cl.emph1
eVnYnYEpponYrYawo	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+w+o]cl.intr1
eVnYnYEpponYrYawAnY	eVnYnY]obl2+E]acc+ponYrYa]acc.pl+wAnY]cl.emph2
eVnYnYEyum	eVnYnY]obl2+E]acc+um]cl.incl1
eVnYnYEvitaA	eVnYnY]obl2+E]acc+vita]acc.pl+A]cl.intr2
eVnYnYEvitaAvawu	eVnYnY]obl2+E]acc+vita]acc.pl+Avawu]cl.min
eVnYnYEvitave	eVnYnY]obl2+E]acc+vita]acc.pl+e]cl.emph1
eVnYnYEvitakUta	eVnYnY]obl2+E]acc+vita]acc.pl+kUta]cl.incl2
eVnYnYEvitamattum	eVnYnY]obl2+E]acc+vita]acc.pl+mattum]cl.rest
eVnYnYEvitavo	eVnYnY]obl2+E]acc+vita]acc.pl+o]cl.intr1
eVnYnYEvitavum	eVnYnY]obl2+E]acc+vita]acc.pl+um]cl.incl1
eVnYnYEvitawwAnY	eVnYnY]obl2+E]acc+vita]acc.pl+wAnY]cl.emph2
eVnYnYEwAnY	eVnYnY]obl2+E]acc+wAnY]cl.emph2
eVnYnYEwwaviraA	eVnYnY]obl2+E]acc+wavira]acc.pl+A]cl.intr2
eVnYnYEwwaviraAvawu	eVnYnY]obl2+E]acc+wavira]acc.pl+Avawu]cl.min
eVnYnYEwwavirave	eVnYnY]obl2+E]acc+wavira]acc.pl+e]cl.emph1
eVnYnYEwwavirakUta	eVnYnY]obl2+E]acc+wavira]acc.pl+kUta]cl.incl2
eVnYnYEwwaviramattum	eVnYnY]obl2+E]acc+wavira]acc.pl+mattum]cl.rest
eVnYnYEwwaviravo	eVnYnY]obl2+E]acc+wavira]acc.pl+o]cl.intr1
eVnYnYEwwaviravum	eVnYnY]obl2+E]acc+wavira]acc.pl+um]cl.incl1
eVnYnYEwwavirawAnY	eVnYnY]obl2+E]acc+wavira]acc.pl+wAnY]cl.emph2
eVnYnYEwwavirwwA	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+A]cl.intr2
eVnYnYEwwavirwwAvawu	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+Avawu]cl.min
eVnYnYEwwavirwwe	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+e]cl.emph1
eVnYnYEwwavirwwukkUta	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+kUta]cl.incl2
eVnYnYEwwavirwwumattum	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+mattum]cl.res

eVnYnYEwwavirwwo	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+o]cl.intr1
eVnYnYEwwavirwwum	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+um]cl.incl1
eVnYnYEwwavirwwuwAnY	eVnYnY]obl2+E]acc+wavirwwu]acc.pp+wAnY]cl.emph2
eVnYnYitamA	eVnYnY]obl2+itam]loc+A]cl.intr2
cVnYnYitamAvawu	eVnYnY]obl2+itam]loc+Avawu]cl.min
eVnYnYitame	eVnYnY]obl2+itam]loc+e]cl.emph1
eVnYnYitamkUta	eVnYnY] obl2+itam] loc+kUta]cl.incl2
cVnYnYitammattum	eVnYnY]obl2+itam]loc+mattum]cl.rest
eVnYnYitamo	eVnYnY]obl2+itam]loc+o]cl.intr1
eVnYnYitamum	eVnYnY]obl2+itam]loc+um]cl.incl1
eVnYnYitamwAnY	eVnYnY]obl2+itam]loc+wAnY]cl.emph2
eVnYnYitamirunwA	eVnYnY]obl2+itamirunwu]abl+A]cl.intr2
eVnYnYitamirunwAvawu	eVnYnY]obl2+itamirunwu]abl+Avawu]cl.min
eVnYnYitamirunwe	eVnYnY]obl2+itamirunwu]abl+e]cl.emph1
eVnYnYitamirunwukkUta	eVnYnY]obl2+itamirunwu]abl+kUta]cl.incl2
eVnYnYitamirunwumattum	eVnYnY]obl2+itamirunwu]abl+mattum]cl.rest
eVnYnYitamirunwo	eVnYnY]obl2+itamirunwu]abl+o]cl.intr1
cVnYnYitamirunwum	eVnYnY]obl2+itamirunwu]abl+um]cl.incl1
eVnYnYitamirunwuwAnY	eVnYnY]obl2+itamirunwu]abl+wAnY]cl.emph2
eVnYnYotA	eVnYnY]obl2+otu]soc+A]cl.intr2
eVnYnYotAvawu	eVnYnY]obl2+otu]soc+Avawu]cl.min
eVnYnYote	eVnYnY]obl2+otu]soc+e]cl.emph1
eVnYnYotukkUta	eVnYnY]obl2+otu]soc+kUta]cl.incl2
eVnYnYotumattum	eVnYnY]obl2+otu]soc+mattum]cl.rest
cVnYnYoto	eVnYnY]obl2+otu]soc+o]cl.intr1
eVnYnYotum	eVnYnY]obl2+otu]soc+um]cl.incl1
eVnYnYotuwAnY	eVnYnY]obl2+otu]soc+wAnY]cl.emph2
cVnYnYutEyawA	eVnYnY]obl2+utEya]gen+A]cl.intr2
eVnYnYutEyawAvawu	eVnYnY]obl2+utEya]gen+Avawu]cl.min
eVnYnYutEyawe	eVnYnY]obl2+utEya]gen+e]cl.emph1
eVnYnYutEyawukkUta	eVnYnY]obl2+utEya]gen+kUta]cl.incl2
eVnYnYutEyawumattum	eVnYnY]obl2+utEya]gen+mattum]cl.rest
eVnYnYutEyawo	eVnYnY]obl2+utEya]gen+o]cl.intr1
eVnYnYutEyawum	eVnYnY]obl2+utEya]gen+um]cl.incl1
eVnYnYutEyawAnY	eVnYnY]obl2+utEya]gen+wAnY]cl.emph2
eVnYnYutanYA	eVnYnY]obl2+utanY]soc+A]cl.intr2
eVnYnYutanYAvawu	eVnYnY]obl2+utanY]soc+Avawu]cl.min
eVnYnYutanYe	eVnYnY]obl2+utanY]soc+e]cl.emph1
eVnYnYutanYkUta	eVnYnY]obl2+utanY]soc+kUta]cl.incl2
eVnYnYutanYmattum	eVnYnY]obl2+utanY]soc+mattum]cl.rest
cVnYnYutanYo	eVnYnY]obl2+utanY]soc+o]cl.intr1
eVnYnYutanYum	eVnYnY]obl2+utanY]soc+um]cl.incl1
eVnYnYutanYwAnY	eVnYnY]obl2+utanY]soc+wAnY]cl.emph2
nAnY	nAnY]nom
nAnYA	nAnY]nom+A]cl.intr2
nAnYAvawu	nAnY]nom+Avawu]cl.min
nAnYeVnYavA	nAnY]nom+eVnYa]nom.pp+A]cl.intr2
nAnYeVnYavAvawu	nAnY]nom+eVnYa]nom.pp+Avawu]cl.min
nAnYeVnYave	nAnY]nom+eVnYa]nom.pp+e]cl.emph1
nAnYeVnYakUta	nAnY]nom+eVnYa]nom.pp+kUta]cl.incl2
nAnYeVnYamattum	nAnY]nom+eVnYa]nom.pp+mattum]cl.rest
nAnYeVnYavo	nAnY]nom+eVnYa]nom.pp+o]cl.intr1
nAnYeVnYavum	nAnY]nom+eVnYa]nom.pp+um]cl.incl1
nAnYeVnYawAnY	nAnY]nom+eVnYa]nom.pp+wAnY]cl.emph2
nAnYeVnYatuvawA	nAnY]nom+eVnYappatuvawu]nom.pp+A]cl.intr2
nAnYeVnYatuvawAvawu	nAnY]nom+eVnYappatuvawu]nom.pp+Avawu]cl.min
nAnYeVnYatuvawe	nAn Y]nom+eVn Yappatuvawu] nom .pp+e] cl. emph 1
nAnYeVnYappatuvawukkUta	nAnY]nom+eVnYappatuvawu]nom.pp+kUta]cl.incl2
nAnYeVnYappatuvawumattum	nAnY]nom+eVnYappatuvawu]nom.pp+mattum]cl.rest
nAnYeVnYatuvawo	nAnY]nom+eVnYappatuvawu]nom.pp+o]cl.intr1
nAnYeVnYappatuvawum	nAnY]nom+eVnYappatuvawu]nom.pp+um]cl.incl1
nAnYeVnYappatuvawuwAnY	nAn Y]nom+eVn Yappatuvawu] nom. pp+wAn Y] cl. emph2
nAnYeVnYpawA	nAnY]nom+eVnYpawu]nom.pp+A]cl.intr2
nAnYeVnYpawAvawu	nAnY]nom+eVnYpawu]nom.pp+Avawu]cl.min
nAnYeVnYpawe	nAnY]nom+eVnYpawu]nom.pp+e]cl.emph1
nAnYeVnYpawukkUta	nAnY]nom+eVnYpawu]nom.pp+kUta]cl.incl2
nAnYeVnYpawumattum	nAn Y]nom+eVnYpawu]nom.pp+mattum]cl. rest
nAnYeVnYpawo	nAnY]nom+eVnYpawu]nom.pp+o]cl.intr1

nAnYeVnYpawum	nAnY]nom+eVnYpawu]nom.pp+um]cl.incl1
nAnYeVnYpawuwAnY	nAnY]nom+eVnYpawu]nom.pp+wAnY]cl.emph2
nAnYeVnYrYavA	nAnY]nom+eVnYrYa]nom.pp+A]cl.intr2
nAnYeVnYrYavAvawu	nAnY]nom+eVnYrYa]nom.pp+Avawu]cl.min
nAnYeVnYrYave	nAnY]nom+eVnYrYa]nom.pp+e]cl.emph1
nAnYeVnYrYakUta	nAnY]nom+eVnYrYa]nom.pp+kUta]cl.incl2
nAnYeVnYrYamattum	nAnY]nom+eVnYrYa]nom.pp+mattum]cl.rest
nAnYeVnYrYavo	nAnY]nom+eVnYrYa]nom.pp+o]cl.intr1
nAnYeVnYrYavum	nAnY]nom+eVnYrYa]nom.pp+um]cl.incl1
nAnYeVnYrYawAnY	nAnY]nom+eVnYrYa]nom.pp+wAnY]cl.emph2
nAnYeVnYrYA	nAnY]nom+eVnYrYu]nom.pp+A]cl.intr2
nAnYeVnYrYAvawu	nAnY]nom+eVnYrYu]nom.pp+Avawu]cl.min
nAnYeVnYrYe	nAnY]nom+eVnYrYu]nom.pp+e]cl.emph1
nAnYeVnYrYukkUta	nAnY]nom+eVnYrYu]nom.pp+kUta]cl.incl2
nAnYeVnYrYumattum	nAnY]nom+eVnYrYu]nom.pp+mattum]cl.rest
nAnYeVnYrYo	nAnY]nom+eVnYrYu]nom.pp+o]cl.intr1
nAnYeVnYrYum	nAnY]nom+eVnYrYu]nom.pp+um]cl.incl1
nAnYeVnYrYuwAnY	nAnY]nom+eVnYrYu]nom.pp+wAnY]cl.emph2
nAnYeVnYumA	nAnY]nom+eVnYum]nom.pp+A]cl.intr2
nAnYeVnYumAvawu	nAnY]nom+eVnYum]nom.pp+Avawu]cl.min
nAnYeVnYume	nAnY]nom+eVnYum]nom.pp+e]cl.emph1
nAnYeVnYumkUta	nAnY]nom+eVnYum]nom.pp+kUta]cl.incl2
nAnYeVnYummattum	nAnY]nom+eVnYum]nom.pp+mattum]cl.rest
nAnYeVnYumo	nAnY]nom+eVnYum]nom.pp+o]cl.intr1
nAnYeVnYumum	nAnY]nom+ eVnYum]nom.pp+um]cl. inc 1l
nAnYe	nAnY]nom+e]cl.emph1
nAnYillA	nAnY]nom+illA]nom. pp
nAnYkUta	nAnY]nom+kUta]cl.incl2
nAnYmattum	nAnY]nom+mattum]cl. rest
nAnYo	nAnY]nom+o]cl.intr1
nAnYum	nAnY]nom+um]cl. incl 1
nAnYwAnY	nAnY]nom+wAnY]cl.emph2

Appendix IV - c

List of Inflectional forms for the Numeral *'oVnYrYu'*

oVnYrYu	oVnYrYu]nom
oVnYrYukkUta	oVnYrYu]nom+kUta]cl.incl2
oVnYrYumattum	oVnYrYu]nom+mattum]cl.rest
oVnYrYum	oVnYrYu]nom+um]cl.incl1
oVnYrYuvarEyA	oVnYrYu]nom+varE+A]cl.intr2
oVnYrYuvarEyAvawu	oVnYrYu]nom+varE+Avawu]cl.min
oVnYrYuvarEye	oVnYrYu]nom+varE+e]cl.emph1
oVnYrYuvarEkkUta	oVnYrYu]nom+varE+kUta]cl.incl2
oVnYrYuvarEmattum	oVnYrYu]nom+varE+mattum]cl.rest
oVnYrYuvarEyo	oVnYrYu]nom+varE+o]cl.intr1
oVnYrYuvarEyum	oVnYrYu]nom+varE+um]cl.incl1
oVnYrYuvarEwAnY	oVnYrYu]nom+varE+wAnY]cl.emph2
oVnYrYuwAnY	oVnYrYu]nom+wAnY]cl.emph2
oVnYrYA	oVnYrYu]obl1+A]cl.intr2
oVnYrYAlA	oVnYrYu]obl1+Al]ins+A]cl.intr2
oVnYrYAlAvawu	oVnYrYu]obl1+Al]ins+Avawu]cl.min
oVnYrYAk	oVnYrYu]obl1+Al]ins+e]cl.emph1
oVnYrYAlkUta	oVnYrYu]obl1+Al]ins+kUta]cl.incl2
oVnYrYAlmattum	oVnYrYujobll +Al]ins+mattum]cl.rest
oVnYrYAk)	oVnYrYu]obl1+Al]ins+o]cl.intr1
oVnYrYAlum	oVnYrYu]obl1+Al]ins+um]cl.incl1
oVnYrYAlwAnY	oVnYrYu]obl1+Al]ins+wAnY]cl.emph2
oVnYrYAvawu	oVnYrYu]obl1+Avawu]cl.min
oVnYrYEyA	oVnYrYu]obl1+E]acc+A]cl.intr2
oVnYrYEyAvawu	oVnYrYu]obl1+E]acc+Avawu]cl.min
oVnYrYEye	oVnYrYujobll +E]acc+e]cl.emph1
oVnYrYEkkAttilumA	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+A]cl.intr2
oVnYrYEkkAttilumAvawu	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+Avawu]cl.min
oVnYrYEkkAttilume	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+e]cl.emph1
oVnYrYEkkAttilumkUta	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+kUta]cl.incl2
oVnYrYEkkAttilummattum	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+mattum]cl.rest
oVnYrYEkkAttilumo	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+o]cl.intr1
oVnYrYEkkAttilumum	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+um]cl.incl1
oVnYrYEkkAttilumwAnY	oVnYrYu]obl1+E]acc+kAttilum]acc.pp+wAnY]cl.emph2
oVnYrYEkkUta	oVnYrYu]obl1+E]acc+kUta]cl.incl2
oVnYrYEkkuriwwA	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+A]cl.intr2
oVnYrYEkkuriwwAvawu	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+Avawu]cl.min
oVnYrYEkkuriwwe	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+e]cl.emph1
oVnYrYEkkuriwwukkUta	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+kUta]cl.incl2
oVnYrYEkkuriwwumattum	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+mattum]cl.rest
oVnYrYEkkuriwwo	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+o]cl.intr1
oVnYrYEkkuriwwum	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+um]cl.incl1
oVnYrYEkkuriwwuwAnY	oVnYrYu]obl1+E]acc+kuriwwu]acc.pp+wAnY]cl.emph2
oVnYrYEmattilumA	oVnYrYu]obl1+E]acc+mattilum]acc.pp+A]cl.intr2
oVnYrYEmattilumAvawu	oVnYrYu]obl1+E]acc+mattilum]acc.pp+Avawu]cl.min
oVnYrYEmattilume	oVnYrYu]obl1+E]acc+mattilum]acc.pp+e]cl.emph1
oVnYrYEmattilumkUta	oVnYrYu]obl1+E]acc+mattilum]acc.pp+kUta]cl.incl2
oVnYrYEmattilummattum	oVnYrYu]obl1+E]acc+mattilum]acc.pp+mattum]cl.rest
oVnYrYEmattilumo	oVnYrYu]obl1+E]acc+mattilum]acc.pp+o]cl.intr1
oVnYrYEmattilumum	oVnYrYu]obl1+E]acc+mattilum]acc.pp+um]cl.incl1
oVnYrYEmattilumwAnY	oVnYrYu]obl1+E]acc+mattilum]acc.pp+wAnY]cl.emph2
oVnYrYEmattum	oVnYrYu]obl1+E]acc+mattum]cl.rest
oVnYrYEyo	oVnYrYu]obl1+E]acc+o]cl.intr1
oVnYrYEpparYrYiyA	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+A]cl.intr2
oVnYrYEpparYrYiyAvawu	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+Avawu]cl.min
oVnYrYEpparYrYiye	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+e]cl.emph1
oVnYrYEpparYrYikkUta	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+kUta]cl.incl2
oVnYrYEpparYrYimattum	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+mattum]cl.rest
oVnYrYEpparYrYiyo	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+o]cl.intr1
oVnYrYEpparYrYiyum	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+um]cl.incl1
oVnYrYEpparYrYiwAnY	oVnYrYu]obl1+E]acc+parYrYi]acc.pl+wAnY]cl.emph2
oVnYrYEppolA	oVnYrYu]obll+E]acc+pol]acc.pl+A]d.intr2
oVnYrYEppolAvawu	oVnYrYu]obl1+E]acc+pol]acc.pl+Avawu]cl.min

oVnYrYEppolc	oVnYrYu]obl1+E]acc+pol]acc.pl+e]cl.emph1
oVnYrYEppolkUta	oVnYrYu]obl1+E]acc+pol]acc.pl+kUta]cl.incl2
oVnYrYEppolmattum	oVnYrYu]obl1+E]acc+pol]acc.pl+mattum]cl.rest
oVnYrYEppolo	oVnYrYu]obl1+E]acc+pol]acc.pl+o]cl.intr1
oVnYrYEppolum	oVnYrYu]obl1+E]acc+pol]acc.pl+um]cl.incl1
oVnYrYEppolwAnY	oVnYrYu]obl1+E]acc+pol]acc.pl+wAnY]cl.emph2
oVnYrYEppolavA	oVnYrYu]obl1+E]acc+pola]acc.pl+A]cl.intr2
oVnYrYEppolavAvawu	oVnYrYu]obl1+E]acc+pola]acc.pl+Avawu]cl.min
oVnYrYEppolave	oVnYrYu]obl1+E]acc+pola]acc.pl+e]cl.emph1
oVnYrYEppolakUta	oVnYrYu]obl1+E]acc+pola]acc.pl+kUta]cl.incl2
oVnYrYEppolamattum	oVnYrYu]obl1+E]acc+pola]acc.pl+mattum]cl.rest
oVnYrYEppolavo	oVnYrYu]obl1+E]acc+pola]acc.pl+o]cl.intr1
oVnYrYEppolavum	oVnYrYu]obl1+E]acc+pola]acc.pl+um]cl.incl1
oVnYrYEppolawAnY	oVnYrYu]obl1+E]acc+pola]acc.pl+wAnY]cl.emph2
oVnYrYEpponYrYavA	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+A]cl.intr2
oVnYrYEpponYrYavAvawu	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+Avawu]cl.min
oVnYrYEpponYrYave	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+e]cl.emph1
oVnYrYEpponYrYakUta	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+kUta]cl.incl2
oVnYrYEpponYrYamattum	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+mattum]cl.rest
oVnYrYEpponYrYavo	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+o]cl.intr1
oVnYrYEpponYrYavum	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+um]cl.incl1
oVnYrYEpponYrYawAnY	oVnYrYu]obl1+E]acc+ponYrYa]acc.pl+wAnY]cl.emph2
oVnYrYEpponYrYA	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+A]cl.intr2
oVnYrYEpponYrYAvawu	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+Avawu]cl.min
oVnYrYEpponYrYe	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+e]cl.emph1
oVnYrYEpponYrYukkUta	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+kUta]cl.incl2
oVnYrYEpponYrYumattum	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+mattum]cl.rest
oVnYrYEpponYrYo	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+o]cl.intr1
oVnYrYEpponYrYum	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+um]cl.incl1
oVnYrYEpponYrYuwAnY	oVnYrYu]obl1+E]acc+ponYrYu]acc.pl+wAnY]cl.emph2
oVnYrYEyum	oVnYrYu]obll+E]acc+um]cl.incl1
oVnYrYEvitavA	oVnYrYu]obl1+E]acc+vita]acc.pl+A]cl.intr2
oVnYrYEvitavAvawu	oVnYrYu]obl1+E]acc+vita]acc.pl+Avawu]cl.min
oVnYrYEvitave	oVnYrYu]obl1+E]acc+vita]acc.pl+e]cl.emph1
oVnYrYEvitakUta	oVnYrYu]obl1+E]acc+vita]acc.pl+kUta]cl.incl2
oVnYrYEvitamattum	oVnYrYu]obl1+E]acc+vita]acc.pl+mattum]cl.rest
oVnYrYEvitavo	oVnYrYu]obl1+E]acc+vita]acc.pl+o]cl.intr1
oVnYrYEvitavum	oVnYrYu]obl1+E]acc+vita]acc.pl+um]cl.incl1
oVnYrYEvitawAnY	oVnYrYu]obl1+E]acc+vita]acc.pl+wAnY]cl.emph2
oVnYrYEwwAnY	oVnYrYu]obl1+E]acc+wAnY]cl.emph2
oVnYrYEwwaviravA	oVnYrYu]obl1+E]acc+wavira]acc.pl+A]cl.intr2
oVnYrYEwwaviravAvawu	oVnYrYu]obl1+E]acc+wavira]acc.pl+Avawu]cl.min
oVnYrYEwwavirave	oVnYrYu]obl1+E]acc+wavira]acc.pl+e]cl.emph1
oVnYrYEwwavirakU ta	oVnYrYu]obl1+E]acc+wavira]acc.pl+kUta]cl.incl2
oVnYrYEwwaviramattum	oVnYrYu]obl1+E]acc+wavira]acc.pl+mattum]cl.rest
oVnYrYEwwaviravo	oVnYrYu]obl1+E]acc+wavira]acc.pl+o]cl.intr1
oVnYrYEwwaviravum	oVnYrYu]obl1+E]acc+wavira]acc.pl+um]cl.incl1
oVnYrYEwwavirawAnY	oVnYrYu]obl1+E]acc+wavira]acc.pl+wAnY]cl.emph2
oVnYrYEwwavirwwA	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+A]cl.intr2
oVnYrYEwwavirwwAvawu	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+Avawu]cl.min
oVnYrYEwwavirwwe	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+e]cl.emph1
oVnYrYEwwavirwwukkUta	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+kUta]cl.incl2
oVnYrYEwwavirwwumattum	oVnYrYu] obl 1+E]acc +wavirwwu] acc. pp+mattum] cl.rest
oVnYrYEwwavirwwo	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+o]cl.intr1
oVnYrYEwwavirwwum	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+um]cl.incl1
oVnYrYEwwavirwwuwAnY	oVnYrYu]obl1+E]acc+wavirwwu]acc.pp+wAnY]cl.emph2
oVnYrYarE	oVnYrYu]obl1+arE]nom.pp
oVnYrYarEyA	oVnYrYu]obl1+arE]nom.pp+A]cl.intr2
oVnYrYarEyAvawu	oVnYrYu]obl1+arE]nom.pp+Avawu]cl.min
oVnYrYarEye	oVnYrYu]obl1+arE]nom.pp+e]cl.emph1
oVnYrYarEkkUta	oVnYrYu]obl1+arE]nom.pp+kUta]cl.incl2
oVnYrYarEmattum	oVnYrYu]obl1+arE]nom.pp+mattum]cl.rest
oVnYrYarEyo	oVnYrYu]obl1+arE]nom.pp+o]cl.intr1
oVnYrYarEyum	oVnYrYu]obl1+arE]nom.pp+um]cl.incl1
oVnYrYarEwAnY	oVnYrYu]obl1+arE]nom.pp+wAnY]cl.emph2
oVnYrYarEkkAl	oVnYrYu]obl1+arEkkAl]nom.pp
oVnYrYarEkkAlA	oVnYrYu]obl1+arEkkAl]nom.pp+A]cl.intr2
oVnYrYarEkkAlAvawu	oVnYrYu]obl1+arEkkAl]nom.pp+Avawu]cl.min

oVnYrYarEkkAle	oVnYrYu]obl1+arEkkAl]nom.pp+e]cl.emph1
oVnYrYarEkkAlkUta	**oVnYrYu]ob!l**+arEkkAl]nom.pp+kUta]cl.incl2
oVnYrYarEkkAlmattum	oVnYrYu]obl1+arEkkAl]nom.pp+mattum]cl.rest
oVnYrYarEkkAlo	oVnYrYu]obl1+arEkkAl]nom.pp+o]cl.intr1
oVnYrYarEkkAlum	oVnYrYu]obl1+arEkkAl]nom.pp+um]cl.incl1
oVnYrYarEkkAlwAnY	oVnYrYu]obl1+arEkkAl]nom.pp+wAnY]cl.emph2
oVnYrYe	oVnYrYu]obl1+e]cl.emph1
oVnYrYckAl	**oVnYrYujobll**+ekAl]nom.pp
oVnYrYekAlA	oVnYrYu]obl1+ekAl]nom.pp+A]cl.intr2
oVnYrYekAlAvawu	oVnYrYu]obl1+ekAl]nom.pp+Avawu]cl.min
oVnYrYekAle	oVnYrYu]obl1+ekAl]nom.pp+e]cl.emph1
oVnYrYekAlkUta	**oVnYrYuJobll**+ekAl]nom.pp+kUta]cl.incl2
oVnYrYekAlmattum	oVnYrYu]obl1+ekAl]nom.pp+mattum]cl.rest
oVnYrYekAlo	oVnYrYu]obl1+ekAl]nom.pp+o]cl.intr1
oVnYrYekAlum	oVnYrYu]obl1+ekAl]nom.pp+um]cl.incl1
oVnYrYekAlwAnY	**oVnYrYuJobll**+ekAl]nom.pp+wAnY]cl.emph2
oVnYrYemukkAl	oVnYrYu]obl1+emukkAl]nom.pp
oVnYrYemukkAlA	oVnYrYu]obl1+emukkAl]nom.pp+A]cl.intr2
oVnYrYemukkAlAvawu	oVnYrYu]obl1+emukkAl]nom.pp+Avawu]cl.min
oVnYrYemukkAle	oVnYrYu]obl1+emukkAl]nom.pp+e]cl.emph1
oVnYrYemukkAlkUta	**oVnYrYuJobll**+emukkAl]nom.pp+kUta]cl.incl2
oVnYrYemukkAlmattum	oVnYrYu]obl1+emukkAl]nom.pp+mattum]cl.rest
oVnYrYemukkAlo	oVnYrYu]obl1+emukkAl]nom.pp+o]cl.intr1
oVnYrYemukkAlum	oVnYrYu]obl1+emukkAl]nom.pp+um]cl.incl1
oVnYrYemukkAlwAnY	**oVnYrYuJobll**+emukkAl]nom.pp+wAnY]cl.emph2
oVnYrYilA	oVnYrYu]obl1+il]loc+A]cl.intr2
oVnYrYilAvawu	oVnYrYu]obl1+il]loc+Avawu]cl.min
oVnYrYile	oVnYrYu]obl1+il]loc+e]cl.emph1
oVnYrYilkUta	oVnYrYu]obl1+il]loc+kUta]cl.incl2
oVnYrYilmattum	oVnYrYu]obl1+il]loc+mattum]cl.rest
oVnYrYilo	oVnYrYu]obl1+il]loc+o]cl.intr1
oVnYrYilum	oVnYrYu]obl1+**ajloc+um]cl.incll**
oVnYrYilwAnY	oVnYrYu]obl1+il]loc+wAnY]cl.emph2
oVnYrYilirunwA	oVnYrYu]obl1+ilirunwu]abl+A]cl.intr2
oVnYrYilirunwAvawu	oVnYrYu]obl1+ilirunwu]abl+Avawu]cl.min
oVnYrYilirunwe	oVnYrYu]obl1+ilirunwu]abl+e]cl.emph1
oVnYrYilirunwo	oVnYrYu]obl1+ilirunwu]abl+o]cl.intr1
oVnYrYilirunwum	**oVnYrYujobll**+ilirunwu]abl+um]cl.incl1
oVnYrYukkAkavA	oVnYrYu]obl1+kkAka]ben+A]cl.intr2
oVnYrYukkAkavAvawu	**oVnYrYujobll**+kkAka]ben+Avawu]cl.min
oVnYrYukkAkave	oVnYrYu]obl1+kkAka]ben+e]cl.emph1
oVnYrYukkAkakUta	oVnYrYu]obl1+kkAka]ben+kUta]cl.incl2
oVnYrYukkAkamattum	**oVnYrYujobll**+kkAka]ben+mattum]cl.rest
oVnYrYukkAkavo	**oVnYrYu]obll**+kkAka]ben+o]cl.intr1
oVnYrYukkAkavum	oVnYrYu]obl1+kkAka]ben+um]cl.incl1
oVnYrYukkAkawAnY	oVnYrYu]obl1+kkAka]ben+wAnY]cl.emph2
oVnYrYukkA	oVnYrYu]obl1+kku]dat+A]cl.intr2
oVnYrYukkAvawu	oVnYrYu]obl1+kku]dat+Avawu]cl.min
oVnYrYukkarukilA	**oVnYrYu]obll**+kku]dat+aruk]dat.adv+il]loc+A]cl.intr2
oVnYrYukkarukilAvawu	oVnYrYu]obl1+kku]dat+aruk]dat.adv+il]loc+Avawu]cl.min
oVnYrYukkarukile	oVnYrYu]obl1+kku]dat+aruk]dat.adv+il]loc+e]cl.emph1
oVnYrYukkarukilkUta	oVnYrYu]obl1+kku]dat+aruk]dat.adv+il]loc+kUta]cl.incl2
oVnYrYukkarukilmattum	oVnYrYu]obl1+kku]dat+aruk]dat.adv+il]loc+mattum]cl.rest
oVnYrYukkarukilo	**oVnYrYujobll**+kku]dat+aruk]dat.adv+il]loc+o]cl.intr1
oVnYrYukkarukilum	**oVnYrYujobll**+kku]dat+aruk]dat.adv+il]loc+um]cl.incl1
oVnYrYukkarukilwAnY	**oVnYrYujobll**+kku]dat+aruk]dat.adv+il]loc+wAnY]cl.emph2
oVnYrYukke	**oVnYrYujobll**+kku]dat+e]cl.emph1
oVnYrYukkukkUta	oVnYrYu]obl1+kku]dat+kUta]cl.incl2
oVnYrYukkumattum	**oVnYrYujobll**+kku]dat+mattum]cl.rest
oVnYrYukkumelA	oVnYrYu]obl1+kku]dat+mel]dat.adv+A]cl.intr2
oVnYrYukkumelAvawu	oVnYrYu]obl1+kku]dat+mel]dat.adv+Avawu]cl.min
oVnYrYukkumele	oVnYrYu]obl1+kku]dat+mel]dat.adv+e]cl.emph1
oVnYrYukkumelkUta	**oVnYrYujobll**+kku]dat+mel]dat.adv+kUta]cl.incl2
oVnYrYukkumelmattum	oVnYrYu]obl1+kku]dat+mel]dat.adv+mattum]cl.rest
oVnYrYukkumelo	oVnYrYu]obl1+kku]dat+mel]dat.adv+o]cl.intr1
oVnYrYukkumelum	oVnYrYu]obl1+kku]dat+mel]dat.adv+um]cl.incl1
oVnYrYukkumelwAnY	oVnYrYu]obl1+kku]dat+mel]dat.adv+wAnY]cl.emph2
oVnYrYukkumunYA	**oVnYrYujobll**+kku]dat+munY]dat.adv+A]cl.intr2

oVnYrYukkumunYAvawu	oVnYrYu]obl1+kku]dat+munY]dat.adv+Avawu]cl.min
oVnYrYukkumunYe	oVnYrYu]obl1+kku]dat+munY]dat.adv+e]cl.emph1
oVnYrYukkumunYkUta	oVnYrYu]obl1+kku]dat+munY]dat.adv+kUta]cl.incl2
oVnYrYukkumunYmattum	oVnYrYu]obl1+kku]dat+munY]dat.adv+mattum]cl.rest
oVnYrYukkumunYo	oVnYrYu]obl1+kku]dat+munY]dat.adv+o]cl.intr1
oVnYrYukkumunYum	oVnYrYu]obl1+kku]dat+munY]dat.adv+um]cl.incl1
oVnYrYukkumunYwAnY	oVnYrYu]obl1+kku]dat+munY]dat.adv+wAnY]cl.emph2
oVnYrYukkumunYnYAlA	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+A]cl.intr2
oVnYrYukkumunYnYAlAvawu	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+Avawu]cl.min
oVnYrYukkumunYnYAle	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+e]cl.emph1
oVnYrYukkumunYnYAlkUta	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+kUta]cl.incl2
oVnYrYukkumunYnYAlmattum	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+mattum]cl.rest
oVnYrYukkumunYnYAlo	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+o]cl.intr1
oVnYrYukkumunYnYAlum	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+um]cl.incl1
oVnYrYukkumunYnYAlwAnY	oVnYrYu]obl1+kku]dat+munYnYAl]dat.adv+wAnY]cl.emph2
oVnYrYukkumunwiyA	oVnYrYu]obl1+kku]dat+munwi]dat.adv+A]cl.intr2
oVnYrYukkumunwiyAvawu	oVnYrYu]obl1+kku]dat+munwi] dat.adv+Avawu]cl.min
oVnYrYukkumunwiye	oVnYrYu]obl1+kku]dat+munwi]dat.adv+e]cl.emph1
oVnYrYukkumunwikkUta	oVnYrYu]obl1+kku]dat+munwi]dat.adv+kUta]cl.incl2
oVnYrYukkumunwimattum	oVnYrYu]obl1+kku]dat+munwi]dat.adv+mattum]cl.rest
oVnYrYukkumunwiyo	oVnYrYu]obl1+kku]dat+munwi]dat.adv+o]cl.intr1
oVnYrYukkumunwiyum	oVnYrYu]obl1+kku]dat+munwi]dat.adv+um]cl.incl1
oVnYrYukkumunwiwAnY	oVnYrYu]obl1+kku]dat+munwi]dat.adv+wAnY]cl.emph2
oVnYrYukko	oVnYrYu]obl1+kku]dat+o]cl.intr1
oVnYrYukkuppinYA	oVnYrYu]obl1+kku]dat+pinY]dat.adv+A]cl.intr2
oVnYrYukkuppinYAvawu	oVnYrYu]obl1+kku]dat+pinY]dat.adv+Avawu]cl.min
oVnYrYukkuppinYe	oVnYrYu]obl1+kku]dat+pinY]dat.adv+e]cl.emph1
oVnYrYukkuppinYkUta	oVnYrYu]obl1+kku]dat+pinY]dat.adv+kUta]cl.incl2
oVnYrYukkuppinYmattum	oVnYrYu]obl1+kku]dat+pinY]dat.adv+mattum]cl.rest
oVnYrYukkuppinYo	oVnYrYu]obl1+kku]dat+pinY]dat.adv+o]cl.intr1
oVnYrYukkuppinYum	oVnYrYu]obl1+kku]dat+pinY]dat.adv+um]cl.incl1
oVnYrYukkuppinYwAnY	oVnYrYu]obl1+kku]dat+pinY]dat.adv+wAnY]cl.emph2
oVnYrYukkuppinYnYAlA	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+A]cl.intr2
oVnYrYukkuppinYnYAlAvawu	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+Avawu]cl.min
oVnYrYukkuppinYnYAle	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+e]cl.emph1
oVnYrYukkuppinYnYAlkUta	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+kUta]cl.incl2
oVnYrYukkuppinYnYAlmattum	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+mattum]cl.rest
oVnYrYukkuppinYnYAlo	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+o]cl.intr1
oVnYrYukkuppinYnY Alum	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+um]cl.incl1
oVnYrYukkuppinYnYAlwAnY	oVnYrYu]obl1+kku]dat+pinYnYAl]dat.adv+wAnY]cl.emph2
oVnYrYukkuppinwiyA	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+A]cl.intr2
oVnYrYukkuppinwiyAvawu	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+Avawu]cl.min
oVnYrYukkuppinwiye	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+e]cl.emph1
oVnYrYukkuppinwikkUta	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+kUta]cl.incl2
oVnYrYukkuppinwimattum	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+mattum]cl.rest
oVnYrYukkuppinwiyo	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+o]cl.intr1
oVnYrYukkuppinwiyum	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+um]cl.incl1
oVnYrYukkuppinwiwAnY	oVnYrYu]obl1+kku]dat+pinwi]dat.adv+wAnY]cl.emph2
oVnYrYukkum	oVnYrYu]obl1+kku]dat+um]cl.incl1
oVnYrYukkuwAnY	oVnYrYu]obl1+kku]dat+wAnY]cl.emph2
oVnYrYo	oVnYrYu]obl1+o]cl.intrl
oVnYrYotA	oVnYrYu]obl1+otu]soc+A]cl.intr2
oVnYrYotAvawu	oVnYrYu]obl1+otu]soc+Avawu]cl.min
oVnYrYote	oVnYrYu]obl1+otu]soc+e]cl.emph1
oVnYrYotukkUta	oVnYrYu]obl1+otu]soc+kUta]cl.incl2
oVnYrYotumattum	oVnYrYu]obl1+otu]soc+mattum]cl.rest
oVnYrYoto	oVnYrYu]obl1+otu]soc+o]cl.intr1
oVnYrYotum	oVnYrYu]obl1+otu]soc+um]cl.incl1
oVnYrYotuwAnY	oVnYrYujobll +otu]soc+wAnY]cl.emph2
oVnYrYutEyavA	oVnYrYu]obll +utEya]gen+A]cl.intr2
oVnYrYutEyavAvawu	oVnYrYu]obl1+utEya]gen+Avawu]cl.min
oVnYrYutEyave	oVnYrYu]obl1+utEya]gen+e]cl.emph1
oVnYrYutEyakUta	oVnYrYu]obl1+utEya]gen+kUta]cl.incl2
oVnYrYutEyamattum	oVnYrYu]obl1+utEya]gen+mattum]cl.rest
oVnYrYutEyavo	oVnYrYu]obl1+utEya]gen+o]cl.intr1
oVnYrYutEyavum	oVnYrYu]obl1+utEya]gen+um]cl.incl1
oVnYrYutEyawAnY	oVnYrYu]obl1+utEya]gen+wAnY]cl.emph2
oVnYrYutanYA	oVnYrYu]obl1+utanY]soc+A]cl.intr2

oVnYrYutanYAvawu	oVnYrYu]obl1+utanY]soc+Avawu]cl.min
oVnYrYutanYe	oVnYrYu]obl1+utanY]soc+e]cl.emph1
oVnYrYutanYkUta	oVnYrYu]obl1+utanY]soc+kUta]cl.incl2
oVnYrYutanYmattum	oVnYrYu]obl1+utanY]soc+mattum]cl.rest
oVnYrYutanYo	oVnYrYu]obl1+utanY]soc+o]cl.intr1
oVnYrYutanYum	oVnYrYu]obl1+utanY]soc+um]cl.incl1
oVnYfYutanYwAnY	oVnYrYu]obl1+utanY]soc+wAnY]cl.emph2
oVru	oVru]obl2
oVrucila	oVru]obl2+cila]obl.pl2
oVrucilarA	oVru]obl2+cila] obl.pl2+ ar] 3P+A]cl.intr2
oVrucilarAvawu	oVru]obl2+cila]obl.pl2+ar]3P+Avawu]cl.min
oVrucilare	oVru]obl2+cila]obl.pl2+ar]3P+e]cl.emph1
oVrucilarkUta	oVru]obl2+cila]obl.pl2+ar]3P+kUta]cl.incl2
oVrucilarmattum	oVru]obl2+cila]obl.pl2+ar]3P+mattum]cl.rest
oVrucilaro	oVru]obl2+cila]obl.pl2+ar]3P+o]cl.intr1
oVrucilarum	oVru]obl2+cila]obl.pl2+ar]3P+um]cl.incl1
oVrucilarwAnY	oVru] obl2+cila] obl.pl2+ar] 3P+wAnY]cl.emph2
oVrucirYu	oVru]obl2+cirYu]obl.pl2
oVrumAwiriyA	oVru]obl2+mAwiri]obl.pl+A]cl.intr2
oVrumAwiriyAvawu	oVru]obl2+mAwiri]obl.pl+Avawu]cl.min
oVrumAwiriye	oVru]obl2+mAwiri]obl.pl+e]cl.emph1
oVrumAwirikkUta	oVru]obl2+mAwiri]obl.pl+kUta]cl.incl2
oVrumAwirimattum	oVru]obl2+mAwiri]obl.pl+mattum]cl.rest
oVrumAwiriyo	oVru]obl2+mAwiri]obl.pl+o]cl.intr1
oVrumAwiriyum	oVru]obl2+mAwiri]obl.pl+um]cl.incl1
oVrumAwirwAnY	oVru]obl2+mAwiri]obl.pl+wAnY]cl.emph2
oVrumaNi	oVru]obl2+maNi]obl.pl
oVrumaNiyA	oVru]obl2+maNi]obl.pl+A]cl.intr2
oVrumaNiyAvawu	oVru]obl2+maNi]obl.pl+Avawu]cl.min
oVrumaNiyalYavil	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+
oVrumaNiyalYavilA	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+A]cl.intr2
oVrumaNiyalYavilAvawu	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+Avawu]cl.min
oVrumaNiyalYavile	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+e]cl.emph1
oVrumaNiyalYavilkUta	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+kUta]cl.incl2
oVrumaNiyalYavilmattum	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+mattum]cl.rest
oVrumaNiyalYavilo	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+o]cl.intr1
oVrumaNiyalYavilum	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+um]cl.incl1
oVrumaNiyalYavilwAnY	oVru]obl2+maNi]obl.pl+alYavu]obl.adv+il]loc+wAnY]cl.emph2
oVrumaNiye	oVru]obl2+maNi]obl.pl+e]cl.emph1
oVrumaNikkUta	oVru]obl2+maNi]obl.pl+kUta]cl.incl2
oVrumaNikkeVllAm	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv
oVrumaNikkeVllAmA	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+A]cl.intr2
oVrumaNikkeVllAmAvawu	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+Avawu]cl.min
oVrumaNikkeVllAme	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+e]cl.emph1
oVrumaNikkeVllAmkUta	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+kUta]cl.incl2
oVrumaNikkeVllAmmattum	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+mattum]cl.rest
oVrumaNikkeVllAmo	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+o]cl.intr1
oVrumaNikkeVllAmum	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+um]cl.incl1
oVrumaNikkeVllAmwAnY	oVru]obl2+maNi]obl.pl+kku]dat+eVllAm]dat.adv+wAnY]cl.emph2
oVrumaNikkumunYnYA	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+A]cl.intr2
oVrumaNikkumunYnYAvawu	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+Avawu]cl.min
oVrumaNikkumunYnYe	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+e]cl.emph1
oVrumaNikkumunYkUta	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+kUta]cl.incl2
oVrumaNikkumunYmattum	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+mattum]cl.rest
oVrumaNikkumunYnYo	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+o]cl.intr1
oVrumaNikkumunYnYum	oVru]obl2+maNi]obl.pl+kku]dat+munY]dat.adv+um]cl.incl1
oVrumaNikkumunYnYAlA	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+A]cl.intr2
oVrumaNikkumunYnYAlAvawu	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+Avawu]cl.min
oVrumaNikkumunYnYAle	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+e]cl.emph1
oVrumaNikkumunYnYAlkUta	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+kUta]cl.incl2
oVrumaNikkumunYnYAlmattum	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+mattum]cl.rest
oVrumaNikkumunYnYAlo	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+o]cl.intr1
oVrumaNikkumunYnYAlum	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+um]cl.incl1
oVrumaNikkumunYnYAlwAnY	oVru]obl2+maNi]obl.pl+kku]dat+munYnYAl]dat.adv+wAnY]cl.emph2
oVrumaNikkumunYpA	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+A]cl.intr2
oVrumaNikkumunYpAvawu	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+Avawu]cl.min
oVrumaNikkumunYpe	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+e]cl.emph1
oVrumaNikkumunYpukkUta	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+kUta]cl.incl2

oVrumaNikkumunYpumattum	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+mattum]cl.rest
oVrumaNikkumunYpo	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+o]cl.intr1
oVrumaNikkumunYpum	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+um]cl.incl1
oVrumaNikkumunYpuwAnY	oVru]obl2+maNi]obl.pl+kku]dat+munYpu]dat.adv+wAnY]cl.emph2
oVrumaNikkumunwiyA	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+A]cl.intr2
oVrumaNikkumunwiyAvawu	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+Avawu]cl.min
oVrumaNikkumunwiye	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+e]cl.emph1
oVrumaNikkumunwikkUta	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+kUta]cl.incl2
oVrumaNikkumunwimattum	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+mattum]cl.rest
oVrumaNikkumunwiyo	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+o]cl.intr1
oVrumaNikkumunwiyum	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+um]cl.incl1
oVrumaNikkumunwiwAnY	oVru]obl2+maNi]obl.pl+kku]dat+munwi]dat.adv+wAnY]cl.emph2
oVrumaNikkuppinYnYA	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+A]cl.intr2
oVrumaNikkuppinYnYAvawu	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+Avawu]cl.min
oVrumaNikkuppinYnYe	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+e]cl.emph1
oVrumaNikkuppinYkUta	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+kUta]cl.incl2
oVrumaNikkuppinYmattum	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+mattum]cl. rest
oVrumaNikkuppinYn Yo	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+o]cl.intr1
oVrumaNikkuppinYnYum	oVru]obl2+maNi]obl.pl+kku]dat+pinY]dat.adv+um]cl.incl1
oVrumaNikkuppinYnYAlA	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+A]cl.intr2
oVrumaNikkuppinYnYAlAvawu	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+Avawu]cl.min
oVrumaNikkuppinYnYAle	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+e]cl.emph1
oVrumaNikkuppinYnYAlkUta	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+kUta]cl.incl2
oVrumaNikkuppinYnYAlmattum	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+mattum]cl.rest
oVrumaNikkuppinYnYAlo	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+o]cl.intr1
oVrumaNikkuppinYnYAlum	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+um]cl.incl1
oVrumaNikkuppinYnYAlwAnY	oVru]obl2+maNi]obl.pl+kku]dat+pinYnYAl]dat.adv+wAnY]cl.emph2
oVrumaNikkuppinYpuwAnY	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]adv.dat+wAnY]cl.emph2
oVrumaNikkuppinYpA	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+A]cl.intr2
oVrumaNikkuppinYpAvawu	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+Avawu]cl.min
oVrumaNikkuppinYpe	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+e]cl.emph1
oVrumaNikkuppinYpukkUta	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+kUta]cl.incl2
oVrumaNikkuppinYpumattum	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+mattum]cl.rest
oVrumaNikkuppinYpo	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+o]cl.intr1
oVrumaNikkuppinYpum	oVru]obl2+maNi]obl.pl+kku]dat+pinYpu]dat.adv+um]cl.incl1
oVrumaNikkuppinwiyA	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+A]cl.intr2
oVrumaNikkuppinwiyAvawu	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+Avawu]cl.min
oVrumaNikkuppinwiye	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+e]cl.emph1
oVrumaNikkuppinwikkUta	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+kUta]cl.incl2
oVrumaNikkuppinwimattum	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+mattum]cl.rest
oVrumaNikkuppinwiyo	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+o]cl.intr1
oVrumaNikkuppinwiyum	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+um]cl.incl1
oVrumaNikkuppinwiwAnY	oVru]obl2+maNi]obl.pl+kku]dat+pinwi]dat.adv+wAnY]cl.emph2
oVrumaNikkulY	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv
oVrumaNikkulYlYA	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+A]cl.intr2
oVrumaNikkulYlYAvawu	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+Avawu]cl.min
oVrumaNikkulYlYe	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+e]cl.emph1
oVrumaNikkulYkUta	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+kUta]cl.incl2
oVrumaNikkulYmattum	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+mattum]cl.rest
oVrumaNikkulYlYo	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+o]cl.intr1
oVrumaNikkulYlYum	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+um]cl.incl1
oVrumaNikkulYwAnY	oVru]obl2+maNi]obl.pl+kku]dat+ulY]dat.adv+wAnY]cl.emph2
oVrumaNimattum	oVru]obl2+maNi]obl.pl+mattum]cl.rest
oVrumaNiyo	oVru]obl2+maNi]obl.pl+o]cl.intr1
oVrumaNiyum	oVru] obl2+maNi] obl.pl+um]cl.incl1
oVrumaNivAkkil	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv
oVrumaNivAkkilA	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+A]cl.intr2
oVrumaNivAkkilAvawu	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+Avawu]cl.min
oVrumaNivAkkile	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+e]cl.emph1
oVrumaNivAkkilkUta	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+kUta]cl.incl2
oVrumaNivAkkilmattum	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+mattum]cl.rest
oVrumaNivAkkilo	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+o]cl.intr1
oVrumaNiv Akkilum	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+um]cl.incl1
oVrumaNivAkkilwAnY	oVru]obl2+maNi]obl.pl+vAkkil]obl.adv+wAnY]cl.emph2
oVrumaNiwAnY	oVru]obl2+maNi]obl.pl+wAnY]cl.emph2
oVrumurYE	oVru]obl2+murYE]obl.pl
oVrumurYEyA	oVru]obl2+murYE]obl.pl+A]cl.intr2
oVrumurYEyAvawu	oVru]obl2+murYE]obl.pl+Avawu]cl.min

oVrumurYEye	oVru]obl2+murYE]obl.pl+e]cl.emph1
oVrumurYEkkUta	oVru]obl2+murYE]obl.pl+kUta]cl.incl2
oVrumurYEmattum	oVru]obl2+murYE]obl.pl+mattum]cl.rest
oVrumurYEyo	oVru]obl2+murYE]obl.pl+o]cl.intr1
oVrumurYEyum	oVru]obl2+murYE]obl.pl+um]cl.incl1
oVrumurYEwAnY	oVru]obl2+murYE]obl.pl+wAnY]cl.emph2
oVruvakE	oVru]obl2+vakE]obl.pl1
oVruvakEyA	oVru]obl2+vakE]obl.pl1+A]cl.intr2
oVruvakEyAvawu	oVru]obl2+vakE]obl.pl1+Avawu]cl.min
oVruvakEye	oVru]obl2+vakE]obl.pl1+e]cl.emph1
oVruvakEkkUta	oVru]obl2+vakE]obl.pl1+kUta]cl.incl2
oVruvakEmattum	oVru]obl2+vakE]obl.pl1+mattum]cl.rest
oVruvakEyo	oVru]obl2+vakE]obl.pl1+o]cl.intr1
oVruvakEyum	oVru] obl2+vakE]obl.pl1+um] cl.incl1
oVruvakEwAnY	oVru]obl2+vakE]obl.pl1+wAnY]cl.emph2
oVruvanY	oVru]obl2+vanY]3sm
oVruvanYA	oVru]obl2+vanY]3sm+A]cl.intr2
oVruvanYAvawu	oVru]obl2+vanY]3sm+Avawu]cl.min
oVruvanYe	oVru]obl2+vanY]3sm+e]cl.emph1
oVruvanYkUta	oVru]obl2+vanY]3sm+kUta]cl.incl2
oVruvanYmattum	oVru]obl2+vanY]3sm+mattum]cl.rest
oVruvanYo	oVru]obl2+vanY]3sm+o]cl.intr1
oVruvanYum	oVru]obl2+vanY]3sm+um]cl.incl1
oVruvanYwAnY	oVru]obl2+vanY]3sm+wAnY]cl.emph2
oVruvar	oVru]obl2+var]3sh
oVruvarA	oVru]obl2+var]3sh+A]cl.intr2
oVruvarAvawu	oVru]obl2+var]3sh+Avawu]cl.min
oVruvare	oVru]obl2+var]3sh+e]cl.emph1
oVruvarkUta	oVru]obl2+var]3sh+kUta]cl.incl2
oVruvarmattum	oVru]obl2+var]3sh+mattum]cl.rest
oVruvaro	oVru] obl2+var] 3sh+o]cl.intr1
oVruvarum	oVru]obl2+var]3sh+um]cl.incl1
oVruvarwAnY	oVru]obl2+var]3sh+wAnY]cl.emph2
oVruviwam	oVru]obl2+viwam]obl.pl1
oVruviwamA	oVru]obl2+viwam]obl.pl1+A]cl.intr2
oVruviwamAvawu	oVru]obl2+viwam]obl.pl1+Avawu]cl.min
oVruviwame	oVru]obl2+viwam]obl.pl1+e]cl.emph1
oVruviwamkU ta	oVru]obl2+viwam]obl.pl1+kUta]cl.incl2
oVruviwa mmfl ttum	oVru]obl2+viwam]obl.pl1+mattum]cl.rest
oVruviwamo	oVru]obl2+viwam]obl.pl1+o]cl.intr1
oVruviwamum	oVru]obl2+viwam]obl.pl1+um]cl.incl1
oVruviwamwAnY	oVru]obl2+viwam]obl.pl1+wAnY]cl.emph2
oVruwalE	oVru]obl2+walE]obl.pl2
oVruwwi	oVru]obl2+wwi]3sf
oVruwwiyA	oVru]obl2+wwi]3sf+A]cl.intr2
oVruwwiyAvawu	oVru]obl2+wwi]3sf+Avawu]cl.min
oVruwwiye	oVru]obl2+wwi]3sf+e]cl.emph1
oVruwwikkUta	oVru]obl2+wwi]3sf+kUta]cl.incl2
oVruwwimattum	oVru]obl2+wwi]3sf+mattum]cl.rest
oVruwwiyo	oVru]obl2+wwi]3sf+o]cl.intr1
oVruwwiyum	oVru]obl2+wwi]3sf+um]cl.incl1
oVruwwiwAnY	oVru]obl2+wwi]3sf+wAnY]cl.emph2

Appendix IV - d
List of Inflectional forms for the Verb *'coVl'*

coVl	coVl]rt+]imp
coVlkirYa	coVl]rt+]fin+kirYa]pradjppl
coVlkirYaweVnYrYa	coVl]rt+]fin+kirYa]pradjppl+eVnYrYa]pl2
coVlkirYaweVnYrYA	coVl]rt+]fin+kirYa]pradjppl+eVnYrYu]pl2+A]cl.intr2
coVlkirYaweVnYrYAl	coVl]rt+]fin+kirYa]pradjppl+eVnYrYAl]pl2
coVlkirYaweVnYrYAlA	coVl]rt+]fin+kirYa]pradjppl+eVnYrYAl]pl2+A]cl.intr2
coVlkirYaweVnYrYAlAvawu	coVl]rt+]fin+kirYa]pradjppl+eVnYrYAl]pl2+Avawu]cl.min
coVlkirYaweVnYrYAle	coVl]rt+]fin+kirYa]pradjppl+eVnYrYAl]pl2+e]cl.emph1
coVlkirYaweVnYrYAlo	coVl]rt+]fin+kirYa]pradjppl+eVnYrYAl]pl2+o]cl.intr1
coVlkirYaweVnYrYAlum	coVl]rt+]fin+kirYa]pradjppl+eVnYrYAl]pl2+um]cl.incl1
coVlkirYaweVnYrYavA	coVl]rt+]fin+kirYa]pradjppl+eVnYrYa]pl2+A]cl.intr2
coVlkirYaweVnYrYavAvawu	coVl]rt+]fin+kirYa]pradjppl+eVnYrYa]pl2+Avawu]cl.min
coVlkirYaweVnYrYAvawu	coVl]rt+]fin+kirYa]pradjppl+eVnYrYu]pl2+Avawu]cl.min
coVlkirYaweVnYrYave	coVl]rt+]fin+kirYa]pradjppl+eVnYrYa]pl2+e]cl.emph1
coVlkirYaweVnYrYavo	coVl]rt+]fin+kirYa]pradjppl+eVnYrYa]pl2+o]cl.intr1
coVlkirYaweVnYrYavum	coVl]rt+]fin+kirYa]pradjppl+eVnYrYa]pl2+um]cl.incl1
coVlkirYaweVnYrYe	coVl]rt+]fin+kirYa]pradjppl+eVnYrYu]pl2+e]cl.emph1
coVlkirYaweVnYrYo	coVl]rt+]fin+kirYa]pradjppl+eVnYrYu]pl2+o]cl.intr1
coVlkirYaweVnYrYu	coVl]rt+]fin+kirYa]pradjppl+eVnYrYu]pl2
coVlkirYaweVnYrYum	coVl]rt+]fin+kirYa]pradjppl+eVnYrYu]pl2+um]cl.incl1
coVlkirYAlY	coVl]rt+kirY]pr+AlY]3sf
coVlkirYAlYA	coVl]rt+kirY]pr+AlY]3sf+A]cl.intr2
coVlkirYAlYammA	coVl]rt+kirY]pr+AlY]3sf+ammA]voc.f
coVlkirYAlYAnYAl	coVl]rt+kirY]pr+AlY]3sf+AnYAl]adm
coVlkirYAlYappA	coVl]rt+kirY]pr+AlY]3sf+appA]voc.m
coVlkirYAlYatA	coVl]rt+kirY]pr+AlY]3sf+atA]voc.m
coVlkirYAlYatI	coVl]rt+kirY]pr+AlY]3sf+atI]voc.f
coVlkirYAlYayyA	coVl]rt+kirY]pr+AlY]3sf+ayyA]voc.mh
coVlkirYAlYe	coVl]rt+kirY]pr+AlY]3sf+e]cl.emph1
coVlkirYAlYeVnYa	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2
coVlkirYAlYeVnYakUta	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+kUta]cl.incl2
coVlkirYAlYeVnYamattum	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+mattum]cl.rest
coVlkirYAlYeVnYappatuvawA	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+A]cl.intr2
coVlkirYAlYeVnYappatuvawAvawu	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+Avawu]cl.min
coVlkirYAlYeVnYappatuvawe	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+e]cl.emph1
coVlkirYAlYeVnYappatuvawo	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+o]cl.intr1
coVlkirYAlYeVnYappatuvawu	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2
coVlkirYAlYeVnYappatuvawukUta	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlkirYAlYeVnYappatuvawum	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+um]cl.incl1
coVlkirYAlYeVnYappatuvawumattum	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+mattum]cl.rest
coVlkirYAlYeVnYappatuvawuwAnY	coVl]rt+kirY]pr+AlY]3sf+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlkirYAlYeVnYavA	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+A]cl.intr2
coVlkirYAlYeVnYavAvawu	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+Avawu]cl.min
coVlkirYAlYeVnYave	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+e]cl.emph1
coVlkirYAlYeVnYavo	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+o]cl.intr1
coVlkirYAlYeVnYavum	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+um]cl.incl1
coVlkirYAlYeVnYawAnY	coVl]rt+kirY]pr+AlY]3sf+eVnYa]pl2+wAnY]cl.emph2
coVlkirYAlYeVnYpawA	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+A]cl.intr2
coVlkirYAlYeVnYpawAvawu	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+Avawu]cl.min
coVlkirYAlYeVnYpawe	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+e]cl.emph1
coVlkirYAlYeVnYpawo	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+o]cl.intr1
coVlkirYAlYeVnYpawu	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2
coVlkirYAlYeVnYpawukUta	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+kUta]cl.incl2
coVlkirYAlYeVnYpawum	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+um]cl.incl1
coVlkirYAlYeVnYpawumattum	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+mattum]cl.rest
coVlkirYAlYeVnYpawuwAnY	coVl]rt+kirY]pr+AlY]3sf+eVnYpawu]pl2+wAnY]cl.emph2
coVlkirYAlYeVnYrYa	coVl]rt+kirY]pr+AlY]3sf+eVnYrYa]pl2
coVlkirYAlYeVnYrYA	coVl]rt+kirY]pr+AlY]3sf+eVnYrYu]pl2+A]cl.intr2
coVlkirYAlYeVnYrYAl	coVl]rt+kirY]pr+AlY]3sf+eVnYrYAl]pl2
coVlkirYAlYeVnYrYAlA	coVl]rt+kirY]pr+AlY]3sf+eVnYrYAl]pl2+A]cl.intr2
coVlkirYAlYeVnYrYAlAvawu	coVl]rt+kirY]pr+AlY]3sf+eVnYrYAl]pl2+Avawu]cl.min
coVlkirYAlYeVnYrYAle	coVl]rt+kirY]pr+AlY]3sf+eVnYrYAl]pl2+e]cl.emph1
coVlkirYAlYeVnYrYAlo	coVl]rt+kirY]pr+AlY]3sf+eVnYrYAl]pl2+o]cl.intr1

coVlkirYAlYeVnYrYAlum
coVlkirYAlYeVnYrYavA
coVlkirYAlYeVnYrYavAvawu
coVlkirYAlYeVnYrYAvawu
coVlkirYAlYeVnYrYave
coVlkirYAlYeVnYrYavo
coVlkirYAlYeVnYrYavum
coVlkirYAlYeVnYrYe
coVlkirYAlYeVnYrYo
coVlkirYAlYeVnYrYu
coVlkirYAlYeVnYrYum
coVlkirYAlYo
coVlkirYAnY
coVlkirYAnYA
coVlkirYAnYammA
coVlkirYAnYAnYAl
coVlkirYAnYappA
coVlkirYAnYatA
coVlkirYAnYatl
coVlkirYAnYayyA
coVlkirYAnYe
coVlkirYAnYeVnYa
coVlkirYAnYeVnYakUta
coVlkirYAnYeVnYamattum
coVlkirYAnYeVnYappatuvawA
coVlkirYAnYeVnYappatuvawAvawu
coVlkirYAnYeVnYappatuvawe
coVlkirYAnYeVnYappatuvawo
coVlkirYAnYeVnYappatuvawu
coVlkirYAnYeVnYappatuvawukUta
coVlkirYAnYeVnYappatuvawum
coVlkirYAnYeVnYappatuvawumattum
coVlkirYAnYeVnYappatuvawuwAnY
coVlkirYAnYeVnYavA
coVlkirYAnYeVnYavAvawu
coVlkirYAnYeVnYave
coVlkirYAnYeVnYavo
coVlkirYAnYeVnYavum
coVlkirYAnYeVnYawAnY
coVlkirYAnYeVnYpawA
coVlkirYAnYeVnYpawAvawu
coVlkirYAnYeVnYpawe
coVlkirYAnYeVnYpawo
coVlkirYAnYeVnYpawu
coVlkirYAnYeVnYpawukUto
coVlkirYAnYeVnYpawum
coVlkirYAnYeVnYpawumattum
coVlkirYAnYeVnYpawuwAnY
coVlkirYAnYeVnYrYa
coVlkirYAnYeVnYrYA
coVlkirYAnYeVnYrYAl
coVlkirYAnYeVnYrYAlA
coVlkirYAnYeVnYrYAlAvawu
coVlkirYAnYeVnYrYAle
coVlkirYAnYeVnYrYAlo
coVlkirYAnYeVnYrYAlum
coVlkirYAnYeVnYrYavA
coVlkirYAnYeVnYrYavAvawu
coVlkirYAnYeVnYrYavawu
coVlkirYAnYeVnYrYave
coVlkirYAnYeVnYrYavo
coVlkirYAnYeVnYrYavum
coVlkirYAnYeVnYrYe
coVlkirYAnYeVnYrYo
coVlkirYAnYeVnYrYu
coVlkirYAnYeVnYrYum
coVlkirYAnYo
coVlkirYAr

coVl]rt+kirY]pr+AlY]3sf+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+kirY]pr+AlY]3sf+eVnYrYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+AlY]3sf+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AlY]3sf+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AlY]3sf+eVnYrYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+AlY]3sf+eVnYrYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+AlY]3sf+eVnYrYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+AlY]3sf+eVnYrYu]pl2+e]cl.emph1
coVl]rt+kirY]pr+AlY]3sf+eVnYrYu]pl2+o]cl.intr1
coVl]rt+kirY]pr+AlY]3sf+eVnYrYu]pl2
coVl]rt+kirY]pr+AlY]3sf+eVnYrYu]pl2+um]cl.incl1
coVl]rt+kirY]pr+AlY]3sf+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm
coVl]rt+kirY]pr+AnY]3sm+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+ammA]voc.f
coVl]rt+kirY]pr+AnY]3sm+AnYAl]adm
coVl]rt+kirY]pr+AnY]3sm+appA]voc.m
coVl]rt+kirY]pr+AnY]3sm+atA]voc.m
coVl]rt+kirY]pr+AnY]3sm+atl]voc.f
coVl]rt+kirY]pr+AnY]3sm+ayyA]voc.mh
coVl]rt+kirY]pr+AnY]3sm+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+mattum]cl.rest
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+AnY]3sm+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+AnY]3sm+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+AnY]3sm+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYa]pl2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYu]pl2+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYAl]pl2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AnY]3sm+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AnY]3sm+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+AnY]3sm+eVnYrYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYu]pl2+e]cl.emph1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYu]pl2+o]cl.intr1
coVl]rt+kirY]pr+AnY]3sm+eVnYrYu]pl2
coVl]rt+kirY]pr+AnY]3sm+eVnYrYu]pl2+um]cl.incl1
coVl]rt+kirY]pr+AnY]3sm+o]cl.intr1
coVl]rt+kirY]pr+Ar]3sh

coVlkirYArA	coVl]rt+kirY]pr+Ar]3sh+A]cl.intr2
coVlkirYArammA	coVl]rt+kirY]pr+Ar]3sh+ammA]voc.f
coVlkirYArappA	coVl]rt+kirY]pr+Ar]3sh+appA]voc.m
coVlkirYAratA	coVl]rt+kirY]pr+Ar]3sh+atA]voc.m
coVlkirYAratI	coVl]rt+kirY]pr+Ar]3sh+atI]voc.f
coVlkirYArayyA	coVl]rt+kirY]pr+Ar]3sh+ayyA]voc.mh
coVlkirYAre	coVl]rt+kirY]pr+Ar]3sh+e]cl.emph1
coVlkirYAreVnYa	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2
coVlkirYAreVnYakUta	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+kUta]cl.incl2
coVlkirYAreVnYamattum	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+mattum]cl.rest
coVlkirYAreVnYappatuvawA	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+A]cl.intr2
coVlkirYAreVnYappatuvawAvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+Avawu]cl.min
coVlkirYAreVnYappatuvawe	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+e]cl.emph1
coVlkirYAreVnYappatuvawo	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+o]cl.intr1
coVlkirYAreVnYappatuvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2
coVlkirYAreVnYappatuvawukUta	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlkirYAreVnYappatuvawum	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+um]cl.incl1
coVlkirYAreVnYappatuvawumattum	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+mattum]cl.rest
coVlkirYAreVnYappatuvawuwAnY	coVl]rt+kirY]pr+Ar]3sh+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlkirYAreVnYavA	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+A]cl.intr2
coVlkirYAreVnYavAvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+Avawu]cl.min
coVlkirYAreVnYave	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+e]cl.emph1
coVlkirYAreVnYavo	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+o]cl.intr1
coVlkirYAreVnYavum	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+um]cl.incl1
coVlkirYAreVnYawAnY	coVl]rt+kirY]pr+Ar]3sh+eVnYa]pl2+wAnY]cl.emph2
coVlkirYAreVnYpawA	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+A]cl.intr2
coVlkirYAreVnYpawAvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+Avawu]cl.min
coVlkirYAreVnYpawe	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+e]cl.emph1
coVlkirYAreVnYpawo	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+o]cl.intr1
coVlkirYAreVnYpawu	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2
coVlkirYAreVnYpawukUta	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+kUta]cl.incl2
coVlkirYAreVnYpawum	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+um]cl.incl1
coVlkirYAreVnYpawumattum	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+mattum]cl.rest
coVlkirYAreVnYpawuwAnY	coVl]rt+kirY]pr+Ar]3sh+eVnYpawu]pl2+wAnY]cl.emph2
coVlkirYAreVnYrYa	coVl]rt+kirY]pr+Ar]3sh+eVnYrYa]pl2
coVlkirYAreVnYrYA	coVl]rt+kirY]pr+Ar]3sh+eVnYrYu]pl2+A]cl.intr2
coVlkirYAreVnYrYAl	coVl]rt+kirY]pr+Ar]3sh+eVnYrYAl]pl2
coVlkirYAreVnYrYAlA	coVl]rt+kirY]pr+Ar]3sh+eVnYrYAl]pl2+A]cl.intr2
coVlkirYAreVnYrYAlAvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYrYAl]pl2+Avawu]cl.min
coVlkirYAreVnYrYAle	coVl]rt+kirY]pr+Ar]3sh+eVnYrYAl]pl2+e]cl.emph1
coVlkirYAreVnYrYAlo	coVl]rt+kirY]pr+Ar]3sh+eVnYrYAl]pl2+o]cl.intr1
coVlkirYAreVnYrYAlum	coVl]rt+kirY]pr+Ar]3sh+eVnYrYAl]pl2+um]cl.incl1
coVlkirYAreVnYrYavA	coVl]rt+kirY]pr+Ar]3sh+eVnYrYa]pl2+A]cl.intr2
coVlkirYAreVnYrYavAvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYrYa]pl2+Avawu]cl.min
coVlkirYAreVnYrYAvawu	coVl]rt+kirY]pr+Ar]3sh+eVnYrYu]pl2+Avawu]cl.min
coVlkirYAreVnYrYave	coVl]rt+kirY]pr+Ar]3sh+eVnYrYa]pl2+e]cl.emph1
coVlkirYAreVnYrYavo	coVl]rt+kirY]pr+Ar]3sh+eVnYrYa]pl2+o]cl.intr1
coVlkirYAreVnYrYavum	coVl]rt+kirY]pr+Ar]3sh+eVnYrYa]pl2+um]cl.incl1
coVlkirYAreVnYrYe	coVl]rt+kirY]pr+Ar]3sh+eVnYrYu]pl2+e]cl.emph1
coVlkirYAreVnYrYo	coVl]rt+kirY]pr+Ar]3sh+eVnYrYu]pl2+o]cl.intr1
coVlkirYAreVnYrYu	coVl]rt+kirY]pr+Ar]3sh+eVnYrYu]pl2
coVlkirYAreVnYrYum	coVl]rt+kirY]pr+Ar]3sh+eVnYrYu]pl2+um]cl.incl1
coVlkirYArkalY	coVl]rt+kirY]pr+ArkalY]3p/h
coVlkirYArkalYA	coVl]rt+kirY]pr+ArkalY]3p/h+A]cl.intr2
coVlkirYArkalYammA	coVl]rt+kirY]pr+ArkalY]3p/h+ammA]voc.f
coVlkirYArkalYappA	coVl]rt+kirY]pr+ArkalY]3p/h+appA]voc.m
coVlkirYArkalYatA	coVl]rt+kirY]pr+ArkalY]3p/h+atA]voc.m
coVlkirYArkalYatI	coVl]rt+kirY]pr+ArkalY]3p/h+atI]voc.f
coVlkirYArkalYayyA	coVl]rt+kirY]pr+ArkalY]3p/h+ayyA]voc.mh
coVlkirYArkalYe	coVl]rt+kirY]pr+ArkalY]3p/h+e]cl.emph1
coVlkirYArkalYeVnYa	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2
coVlkirYArkalYeVnYakUta	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+kUta]cl.incl2
coVlkirYArkalYeVnYamattum	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+mattum]cl.rest
coVlkirYArkalYeVnYappatuvawA	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVlkirYArkalYeVnYappatuvawAvawu	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVlkirYArkalYeVnYappatuvawe	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVlkirYArkalYeVnYappatuvawo	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVlkirYArkalYeVnYappatuvawu	coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2

coVlkirYArkalYeVnYappatuvawukUta
coVlkirYArkalYeVnYappatuvawum
coVlkirYArkalYeVnYappatuvawumattum
coVlkirYArkalYeVnYappatuvawuwAnY
coVlkirYArkalYeVnYavA
coVlkirYArkalYeVnYavAvawu
coVlkirYArkalYeVnYave
coVlkirYArkalYeVnYavo
coVlkirYArkalYeVnYavum
coVlkirYArkalYeVnYawAnY
coVlkirYArkalYeVnYpawA
coVlkirYArkalYeVnYpawAvawu
coVlkirYArkalYeVnYpawe
coVlkirYArkalYeVnYpawo
coVlkirYArkalYeVnYpawu
coVlkirYArkalYeVnYpawukUta
coVlkirYArkalYeVnYpawum
coVlkirYArkalYeVnYpawumattum
coVlkirYArkalYeVnYpawuwAnY
coVlkirYArkalYeVnYrYa
coVlkirYArkalYeVnYrYA
coVlkirYArkalYeVnYrYAl
coVlkirYArkalYeVnYrYAlA
coVlkirYArkalYeVnYrYAlAvawu
coVlkirYArkalYeVnYrYAle
coVlkirYArkalYeVnYrYAlo
coVlkirYArkalYeVnYrYAlum
coVlkirYArkalYeVnYrYavA
coVlkirYArkalYeVnYrYavAvawu
coVlkirYArkalYeVnYrYAvawu
coVlkirYArkalYeVnYrYave
coVlkirYArkalYeVnYrYavo
coVlkirYArkalYeVnYrYavum
coVlkirYArkalYeVnYrYe
coVlkirYArkalYeVnYrYo
coVlkirYArkalYeVnYrYu
coVlkirYArkalYeVnYrYum
coVlkirYArkalYo
coVlkirYAro
coVlkirYAy
coVlkirYAyA
coVlkirYAyammA
coVlkirYAyAnYAl
coVlkirYAyappA
coVlkirYAyatA
coVlkirYAyatI
coVlkirYAyayyA
coVlkirYAye
coVlkirYAyeVnYa
coVlkirYAyeVnYakUta
coVlkirYAyeVnYamattum
coVlkirYAyeVnYappatuvawA
coVlkirYAyeVnYappatuvawAvawu
coVlkirYAyeVnYappatuvawe
coVlkirYAyeVnYappatuvawo
coVlkirYAyeVnYappatuvawu
coVlkirYAyeVnYappatuvawukUta
coVlkirYAyeVnYappatuvawum
coVlkirYAyeVnYappatuvawumattum
coVlkirYAyeVnYappatuvawuwAnY
coVlkirYAyeVnYavA
coVlkirYAyeVnYavAvawu
coVlkirYAyeVnYave
coVlkirYAyeVnYavo
coVlkirYAyeVnYavum
coVlkirYAyeVnYawAnY
coVlkirYAyeVnYpawA
coVlkirYAyeVnYpawAvawu

coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYa]pl2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYu]pl2+A]cl.intr2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYAl]pl2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYu]pl2+e]cl.emph1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYu]pl2+o]cl.intr1
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYu]pl2
coVl]rt+kirY]pr+ArkalY]3p/h+eVnYrYu]pl2+um]cl.incl1
coVl]rt+kirY]pr+ArkalY]3p/h+o]cl.intr1
coVl]rt+kirY]pr+Ar]3sh+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s
coVl]rt+kirY]pr+Ay]2s+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+ammA]voc.f
coVl]rt+kirY]pr+Ay]2s+AnYAl]adm
coVl]rt+kirY]pr+Ay]2s+appA]voc.m
coVl]rt+kirY]pr+Ay]2s+atA]voc.m
coVl]rt+kirY]pr+Ay]2s+atI]voc.f
coVl]rt+kirY]pr+Ay]2s+ayyA]voc.mh
coVl]rt+kirY]pr+Ay]2s+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+mattum]cl.rest
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+Ay]2s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+Ay]2s+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+Avawu]cl.min

coVlkirYAyeVnYpawe
coVlkirYAyeVnYpawo
coVlkirYAyeVnYpawu
coVlkirYAyeVnYpawukUta
coVlkirYAyeVnYpawum
coVlkirYAyeVnYpawumattum
coVlkirYAyeVnYpawuwAnY
coVlkirYAyeVnYrYa
coVlkirYAyeVnYrYA
coVlkirYAyeVnYrYAl
coVlkirYAyeVnYrYAlA
coVlkirYAyeVnYrYAlAvawu
coVlkirYAyeVnYrYAle
coVlkirYAyeVnYrYAlo
coVlkirYAyeVnYrYAlum
coVlkirYAyeVnYrYavA
coVlkirYAyeVnYrYavAvawu
coVlkirYAyeVnYrYAvawu
coVlkirYAyeVnYrYave
coVlkirYAyeVnYrYavo
coVlkirYAyeVnYrYavum
coVlkirYAyeVnYrYe
coVlkirYAyeVnYrYo
coVlkirYAyeVnYrYu
coVlkirYAyeVnYrYum
coVlkirYAyo
coVlkirYelY
coVlkirYelYA
coVlkirYelYammA
coVlkirYelYAnYAl
coVlkirYelYappA
coVlkirYelYatA
coVlkirYelYatI
coVlkirYelYayyA
coVlkirYelYe
coVlkirYelYeVnYa
coVlkirYelYeVnYakUta
coVlkirYelYeVnYamattum
coVlkirYelYeVnYappatuvawA
coVlkirYelYeVnYappatuvawAvawu
coVlkirYelYeVnYappatuvawe
coVlkirYelYeVnYappatuvawo
coVlkirYelYeVnYappatuvawu
coVlkirYelYeVnYappatuvawukUta
coVlkirYelYeVnYappatuvawum
coVlkirYelYeVnYappatuvawumattum
coVlkirYelYeVnYappatuvawuwAnY
coVlkirYelYeVnYavA
coVlkirYelYeVnYavAvawu
coVlkirYelYeVnYave
coVlkirYelYeVnYavo
coVlkirYelYeVnYavum
coVlkirYelYeVnYawAnY
coVlkirYelYeVnYpawA
coVlkirYelYeVnYpawAvawu
coVlkirYelYeVnYpawe
coVlkirYelYeVnYpawo
coVlkirYelYeVnYpawu
coVlkirYelYeVnYpawukUta
coVlkirYelYeVnYpawum
coVlkirYelYeVnYpawumattum
coVlkirYelYeVnYpawuwAnY
coVlkirYelYeVnYrYa
coVlkirYelYeVnYrYA
coVlkirYelYeVnYrYAl
coVlkirYelYeVnYrYAlA
coVlkirYelYeVnYrYAlAvawu
coVlkirYelYeVnYrYAle

coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+Ay]2s+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+Ay]2s+eVnYrYa]pl2
coVl]rt+kirY]pr+Ay]2s+eVnYrYu]pl2+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+eVnYrYAl]pl2
coVl]rt+kirY]pr+Ay]2s+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+kirY]pr+Ay]2s+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+kirY]pr+Ay]2s+eVnYrYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+Ay]2s+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+Ay]2s+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+Ay]2s+eVnYrYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYrYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s+eVnYrYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+Ay]2s+eVnYrYu]pl2+e]cl.emph1
coVl]rt+kirY]pr+Ay]2s+eVnYrYu]pl2+o]cl.intr1
coVl]rt+kirY]pr+Ay]2s+eVnYrYu]pl2
coVl]rt+kirY]pr+Ay]2s+eVnYrYu]pl2+um]cl.incl1
coVl]rt+kirY]pr+Ay]2s+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br
coVl]rt+kirY]pr+elY]2sh.br+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+ammA]voc.f
coVl]rt+kirY]pr+elY]2sh.br+AnYAl]adm
coVl]rt+kirY]pr+elY]2sh.br+appA]voc.m
coVl]rt+kirY]pr+elY]2sh.br+atA]voc.m
coVl]rt+kirY]pr+elY]2sh.br+atI]voc.f
coVl]rt+kirY]pr+elY]2sh.br+ayyA]voc.mh
coVl]rt+kirY]pr+elY]2sh.br+e]cl.emph1
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+mattum]cl.rest
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+elY]2sh.br+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+elY]2sh.br+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+elY]2sh.br+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYa]pl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYu]pl2+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYAl]pl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYAl]pl2+e]cl.emph1

coVlkirYelYeVnYrYAlo
coVlkirYelYeVnYrYAlum
coVlkirYelYeVnYrYavA
coVlkirYelYeVnYrYavAvawu
coVlkirYelYeVnYrYAvawu
coVlkirYelYeVnYrYave
coVlkirYelYeVnYrYavo
coVlkirYelYeVnYrYavum
coVlkirYelYeVnYrYe
coVlkirYelYeVnYrYo
coVlkirYelYeVnYrYu
coVlkirYelYeVnYrYum
coVlkirYdYo
coVlkirYenY
coVlkirYenYA
coVlkirYenYammA
coVlkirYenYAnYAl
coVlkirYenYappA
coVlkirYenYatA
coVlkirYenYatl
coVlkirYenYayyA
coVlkirYenYe
coVlkirYenYeVnYa
coVlkirYenYeVnYakUta
coVlkirYenYeVnYamattum
coVlkirYenYeVnYappatuvawA
coVlkirYenYeVnYappatuvawAvawu
coVlkirYenYeVnYappatuvawe
coVlkirYenYeVnYappatuvawo
coVlkirYenYeVnYappatuvawu
coVlkirYenYeVnYappatuvawukUta
coVlkirYenYeVnYappatuvawum
coVlkirYenYeVnYappatuvawumattum
coVlkirYenYeVnYappatuvawuwAnY
coVlkirYenYeVnYavA
coVlkirYenYeVnYavAvawu
coVlkirYenYeVnYave
coVlkirYenYeVnYavo
coVlkirYenYeVnYavum
coVlkirYenYeVnYawAnY
coVlkirYenYeVnYpawA
coVlkirYenYeVnYpawAvawu
coVlkirYenYeVnYpawe
coVlkirYenYeVnYpawo
coVlkirYenYeVnYpawu
coVlkirYenYeVnYpawukUta
coVlkirYenYeVnYpawum
coVlkirYenYeVnYpawumattum
coVlkirYenYeVnYpawuwAnY
coVlkirYenYeVnYrYa
coVlkirYenYeVnYrYA
coVlkirYenYeVnYrYAl
coVlkirYenYeVnYrYAlA
coVlkirYenYeVnYrYAlAvawu
coVlkirYenYeVnYrYAle
coVlkirYenYeVnYrYAlo
coVlkirYenYeVnYrYAlum
coVlkirYenYeVnYrYavA
coVlkirYenYeVnYrYavAvawu
coVlkirYenYeVnYrYAvawu
coVlkirYenYeVnYrYave
coVlkirYenYeVnYrYavo
coVlkirYenYeVnYrYavum
coVlkirYenYeVnYrYe
coVlkirYenYeVnYrYo
coVlkirYenYeVnYrYu
coVlkirYenYeVnYrYum
coVlkirYenYo

coVl]rt+kirY]pr+elY]2sh.br+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYu]pl2+e]cl.emph1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYu]pl2+o]cl.intr1
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYu]pl2
coVl]rt+kirY]pr+elY]2sh.br+eVnYrYu]pl2+um]cl.incl1
coVl]rt+kirY]pr+elY]2sh.br+o]cl.intr1
coVl]rt+kirY]pr+enY]1s
coVl]rt+kirY]pr+enY]1s+A]cl.intr2
coVl]rt+kirY]pr+enY]1s+ammA]voc.f
coVl]rt+kirY]pr+enY]1s+AnYAl]adm
coVl]rt+kirY]pr+enY]1s+appA]voc.m
coVl]rt+kirY]pr+enY]1s+atA]voc.m
coVl]rt+kirY]pr+enY]1s+atl]voc.f
coVl]rt+kirY]pr+enY]1s+ayyA]voc.mh
coVl]rt+kirY]pr+enY]1s+e]cl.emph1
coVl]rt+kirY]pr+enY]1s+eVnYa]pl2
coVl]rt+kirY]pr+enY]1s+eVnYa]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+enY] 1 s+eVnYa]pl2+mattum]cl.rest
coVl]rt+kirY]pr+enY]1s+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+enY]1s+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+enY] 1 s+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+enY]1s+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+enY]1s+eVnYappatuvawu]pl2
coVl]rt+kirY]pr+enY]1s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+enY] 1 s+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+enY]1s+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+enY] 1 s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+enY]1s+eVnYa]pl2+A]cl.intr2
coVl]rt+kirY]pr+enY] 1 s+eVnYa]pl2+Avawu]cl.min
coVl]rt+kirY]pr+ enY] 1 s+eVnYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+enY]1s+eVnYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+enY]1s+eVnYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+enY]1s+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+A]cl.intr2
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+e]cl.emph1
coVl]rt+kirY]pr+enY] 1 s+eVnYapawu]pl2+o]cl.intr1
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+kUta]cl.incl2
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+um]cl.incl1
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+mattum]cl.rest
coVl]rt+kirY]pr+enY]1s+eVnYapawu]pl2+wAnY]cl.emph2
coVl]rt+kirY]pr+enY]1s+eVnYrYa]pl2
coVl]rt+kirY]pr+enY] 1s+eVnYrYu]pl2+A]cl.intr2
coVl]rt+kirY]pr+enY]1s+eVnYrYAl]pl2
coVl]rt+kirY]pr+enY]1s+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+kirY]pr+enY] 1s+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+kirY]pr+enY]1s+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+kirY]pr+enY]1s+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+kirY]pr+enY]1s+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+kirY]pr+enY]1s+eVnYrYa]pl2+A]cl.intr2
TOVl]rt+kirY]pr+cnY]ls+eVnYrYa]pl2+AvawvgAmin
coVl]rt+kirY]pr+enY]1s+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+kirY]pr+enY]1s+eVnYrYa]pl2+e]cl.emph1
coVl]rt+kirY]pr+enY]1s+eVnYrYa]pl2+o]cl.intr1
coVl]rt+kirY]pr+enY]1s+eVnYrYa]pl2+um]cl.incl1
coVl]rt+kirY]pr+enY]1s+eVnYrYu]pl2+e]cl.emph1
coVl]rt+kirY]pr+enY]1s+eVnYrYu]pl2+o]cl.intr1
coVl]rt+kirY]pr+enY]1s+eVnYrYu]pl2
coVl]rt+kirY]pr+enY]1s+eVnYrYu]pl2+um]cl.incl1
coVl]rt+kirY]pr+enY]1s+o]cl.intr1

coVlkirYIr	coVl]rt+kirY]pr+Ir]2shl/p
coVlkirYIrA	coVl]rt+kirY]pr+Ir]2shl/p+A]cl.intr2
coVlkirYIrammA	coVl]rt+kirY]pr+Ir]2shl/p+ammA]voc.f
coVlkirYIrAnYAl	coVl]rt+kirY]pr+Ir]2shl/p+AnYAl]adm
coVlkirYIrappA	coVl]rt+kirY]pr+Ir]2shl/p+appA]voc.m
coVlkirYIratA	coVl]rt+kirY]pr+Ir]2shl/p+atA]voc.m
coVlkirYIratI	coVl]rt+kirY]pr+Ir]2shl/p+atI]voc.f
coVlkirYIrayyA	coVl]rt+kirY]pr+Ir]2shl/p+ayyA]voc.mh
coVlkirYIre	coVl]rt+kirY]pr+Ir]2shl/p+e]cl.emph1
coVlkirYIreVnYa	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2
coVlkirYIreVnYakUta	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+kUta]cl.incl2
coVlkirYIreVnYamattum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+mattum]cl.rest
coVlkirYIreVnYappatuvawA	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+A]cl.intr2
coVlkirYIreVnYappatuvawAvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+Avawu]cl.min
coVlkirYIreVnYappatuvawe	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+e]cl.emph1
coVlkirYIreVnYappatuvawo	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+o]cl.intr1
coVlkirYIreVnYappatuvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2
coVlkirYIreVnYappatuvawukUta	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlkirYIreVnYappatuvawum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+um]cl.incl1
coVlkirYIreVnYappatuvawumattum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+mattum]cl.rest
coVlkirYIreVnYappatuvawuwAnY	coVl]rt+kirY]pr+Ir]2shl/p+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlkirYIreVnYavA	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+A]cl.intr2
coVlkirYIreVnYavAvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+Avawu]cl.min
coVlkirYIreVnYave	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+e]cl.emph1
coVlkirYIreVnYavo	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+o]cl.intr1
coVlkirYIreVnYavum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+um]cl.incl1
coVlkirYIreVnYawAnY	coVl]rt+kirY]pr+Ir]2shl/p+eVnYa]pl2+wAnY]cl.emph2
coVlkirYIreVnYpawA	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+A]cl.intr2
coVlkirYIreVnYpawAvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+Avawu]cl.min
coVlkirYIreVnYpawe	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+e]cl.emph1
coVlkirYIreVnYpawo	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+o]cl.intr1
coVlkirYIreVnYpawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2
coVlkirYIreVnYpawukUta	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+kUta]cl.incl2
coVlkirYIreVnYpawum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+um]cl.incl1
coVlkirYIreVnYpawumattum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+mattum]cl.rest
coVlkirYIreVnYpawuwAnY	coVl]rt+kirY]pr+Ir]2shl/p+eVnYpawu]pl2+wAnY]cl.emph2
coVlkirYIreVnYrYa	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYa]pl2
coVlkirYIreVnYrYA	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYu]pl2+A]cl.intr2
coVlkirYIreVnYrYAl	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYAl]pl2
coVlkirYIreVnYrYAlA	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYAl]pl2+A]cl.intr2
coVlkirYIreVnYrYAlAvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYAl]pl2+Avawu]cl.min
coVlkirYIreVnYrYAle	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYAl]pl2+e]cl.emph1
coVlkirYIreVnYrYAlo	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYAl]pl2+o]cl.intr1
coVlkirYIreVnYrYAlum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYAl]pl2+um]cl.incl1
coVlkirYIreVnYrYavA	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYa]pl2+A]cl.intr2
coVlkirYIreVnYrYavAvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYa]pl2+Avawu]cl.min
coVlkirYIreVnYrYAvawu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYu]pl2+Avawu]cl.min
coVlkirYIreVnYrYave	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYa]pl2+e]cl.emph1
coVlkirYIreVnYrYavo	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYa]pl2+o]cl.intr1
coVlkirYIreVnYrYavum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYa]pl2+um]cl.incl1
coVlkirYIreVnYrYe	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYu]pl2+e]cl.emph1
coVlkirYIreVnYrYo	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYu]pl2+o]cl.intr1
coVlkirYIreVnYrYu	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYu]pl2
coVlkirYIreVnYrYum	coVl]rt+kirY]pr+Ir]2shl/p+eVnYrYu]pl2+um]cl.incl1
coVlkirYIrkalY	coVl]rt+kirY]pr+IrkalY]2p/h
coVlkirYIrkalYA	coVl]rt+kirY]pr+IrkalY]2p/h+A]cl.intr2
coVlkirYIrkalYammA	coVl]rt+kirY]pr+IrkalY]2p/h+ammA]voc.f
coVlkirYIrkalYAnYAl	coVl]rt+kirY]pr+IrkalY]2p/h+AnYAl]adm
coVlkirYIrkalYappA	coVl]rt+kirY]pr+IrkalY]2p/h+appA]voc.m
coVlkirYIrkalYatA	coVl]rt+kirY]pr+IrkalY]2p/h+atA]voc.m
coVlkirYIrkalYatI	coVl]rt+kirY]pr+IrkalY]2p/h+atI]voc.f
coVlkirYIrkalYayyA	coVl]rt+kirY]pr+IrkalY]2p/h+ayyA]voc.mh
coVlkirYIrkalYe	coVl]rt+kirY]pr+IrkalY]2p/h+e]cl.emph1
coVlkirYIrkalYeVnYa	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2
coVlkirYIrkalYeVnYakUta	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+kUta]cl.incl2
coVlkirYIrkalYeVnYamattum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+mattum]cl.rest
coVlkirYIrkalYeVnYappatuvawA	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVlkirYIrkalYeVnYappatuvawAvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+Avawu]cl.min

coVlkirYIrkalYeVnYappatuvawe	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVlkirYIrkalYeVnYappatuvawo	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVlkirYIrkalYeVnYappatuvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2
coVlkirYIrkalYeVnYappatuvawukUta	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlkirYIrkalYeVnYappatuvawum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVlkirYIrkalYeVnYappatuvawumattum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVlkirYIrkalYeVnYappatuvawuwAnY	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlkirYIrkalYeVnYavA	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+A]cl.intr2
coVlkirYIrkalYeVnYavAvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+Avawu]cl.min
coVlkirYIrkalYeVnYave	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+e]cl.emph1
coVlkirYIrkalYeVnYavo	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+o]cl.intr1
coVlkirYIrkalYeVnYavum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+um]cl.incl1
coVlkirYIrkalYeVnYawAnY	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYa]pl2+wAnY]cl.emph2
coVlkirYIrkalYeVnYpawA	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+A]cl.intr2
coVlkirYIrkalYeVnYpawAvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+Avawu]cl.min
coVlkirYIrkalYeVnYpawe	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+e]cl.emph1
coVlkirYIrkalYeVnYpawo	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+o]cl.intr1
coVlkirYIrkalYeVnYpawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2
coVlkirYIrkalYeVnYpawukUta	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+kUta]cl.incl2
coVlkirYIrkalYeVnYpawum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+um]cl.incl1
coVlkirYIrkalYeVnYpawumattum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+mattum]cl.rest
coVlkirYIrkalYeVnYpawuwAnY	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVlkirYIrkalYeVnYrYa	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYa]pl2
coVlkirYIrkalYeVnYrYA	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYu]pl2+A]cl.intr2
coVlkirYIrkalYeVnYrYAl	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYAl]pl2
coVlkirYIrkalYeVnYrYAlA	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYAl]pl2+A]cl.intr2
coVlkirYIrkalYeVnYrYAlAvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYAl]pl2+Avawu]cl.min
coVlkirYIrkalYeVnYrYAle	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYAl]pl2+e]cl.emph1
coVlkirYIrkalYeVnYrYAlo	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYAl]pl2+o]cl.intr1
coVlkirYIrkalYeVnYrYAlum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYAl]pl2+um]cl.incl1
coVlkirYIrkalYeVnYrYavA	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYa]pl2+A]cl.intr2
coVlkirYIrkalYeVnYrYavAvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYa]pl2+Avawu]cl.min
coVlkirYIrkalYeVnYrYAvawu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYu]pl2+Avawu]cl.min
coVlkirYIrkalYeVnYrYave	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYa]pl2+e]cl.emph1
coVlkirYIrkalYeVnYrYavo	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYa]pl2+o]cl.intr1
coVlkirYIrkalYeVnYrYavum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYa]pl2+um]cl.incl1
coVlkirYIrkalYeVnYrYe	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYu]pl2+e]cl.emph1
coVlkirYIrkalYeVnYrYo	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYu]pl2+o]cl.intr1
coVlkirYIrkalYeVnYrYu	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYu]pl2
coVlkirYIrkalYeVnYrYum	coVl]rt+kirY]pr+IrkalY]2p/h+eVnYrYu]pl2+um]cl.incl1
coVlkirYIrkalYo	coVl]rt+kirY]pr+IrkalY]2p/h+o]cl.intr1
coVlkirYIr	coVl]rt+kirY]pr+Ir]2shl/+o]cl.intr1
coVlkirYom	coVl]rt+kirY]pr+om]1pl
coVlkirYomA	coVl]rt+kirY]pr+om]1pl+A]cl.intr2
coVlkirYomammA	coVl]rt+kirY]pr+om]1pl+ammA]voc.f
coVlkirYomAnYAl	coVl]rt+kirY]pr+om]1pl+AnYAl]adm
coVlkirYomappA	coVl]rt+kirY]pr+om]1pl+appA]*voc.m*
coVlkirYomatA	coVl]rt+kirY]pr+om]1pl+atA]voc.m
coVlkirYomatI	coVl]rt+kirY]pr+om]1pl+atI]voc.f
coVlkirYomayyA	coVl]rt+kirY]pr+om]1pl+ayyA]voc.mh
coVlkirYome	coVl]rt+kirY]pr+om]1pl+e]cl.emph1
coVlkirYomeVnYa	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2
coVlkirYomeVnYakUta	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+kUta]cl.incl2
coVlkirYomeVnYamattum	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+mattum]cl.rest
coVlkirYomeVnYappatuvawA	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+A]cl.intr2
coVlkirYomeVnYappatuvawAvawu	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+Avawu]cl.min
coVlkirYomeVnYappatuvawe	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+e]cl.emph1
coVlkirYomeVnYappatuvawo	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+o]cl.intr1
coVlkirYomeVnYappatuvawu	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2
coVlkirYomeVnYappatuvawukUta	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlkirYomeVnYappatuvawum	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+um]cl.incl1
coVlkirYomeVnYappatuvawumattum	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+mattum]cl.rest
coVlkirYomeVnYappatuvawuwAnY	coVl]rt+kirY]pr+om]1pl+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlkirYomeVnYavA	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+A]cl.intr2
coVlkirYomeVnYavAvawu	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+Avawu]cl.min
coVlkirYomeVnYave	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+e]cl.emph1
coVlkirYomeVnYavo	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+o]cl.intr1
coVlkirYomeVnYavum	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+um]cl.incl1

coVlkirYomeVnYawAnY	coVl]rt+kirY]pr+om]1pl+eVnYa]pl2+wAnY]cl.emph2
coVlkirYomeVnYpawA	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+A]cl.intr2
coVlkirYomeVnYpawAvawu	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+Avawu]cl.min
coVlkirYomeVnYpawe	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+e]cl.emph1
coVlkirYomeVnYpawo	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+o]cl.intr1
coVlkirYomeVnYpawu	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2
coVlkirYomeVnYpawukUta	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+kUta]cl.incl2
coVlkirYomeVnYpawum	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+um]cl.incl1
coVlkirYomeVnYpawumattum	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+mattum]cl.rest
coVlkirYomeVnYpawuwAnY	coVl]rt+kirY]pr+om]1pl+eVnYpawu]pl2+wAnY]cl.emph2
coVlkirYomeVnYrYa	coVl]rt+kirY]pr+om]1pl+eVnYrYa]pl2
coVlkirYomeVnYrYA	coVl]rt+kirY]pr+om]1pl+eVnYrYu]pl2+A]cl.intr2
coVlkirYomeVnYrYAl	coVl]rt+kirY]pr+om] 1 pl+eVnYrYAl] pl2
coVlkirYomeVnYrYAlA	coVl]rt+kirY]pr+om]1pl+eVnYrYAl]pl2+A]cl.intr2
coVlkirYomeVnYrYAlAvawu	coVl]rt+kirY]pr i om]1pl+eVnYrYAl]pl2+Avawu]cl.min
coVlkirYomeVnYrYAle	coVl]rt+kirY]pr+om]1pl+eVnYrYAl]pl2+e]cl.emph1
coVlkirYomeVnYrYAlo	coVl]rt+kirY]pr+om]1pl+eVnYrYAl]pl2+o]cl.intr1
coVlkirYomeVnYrYAlum	coVl]rt+kirY]pr+om]1pl+eVnYrYAl]pl2+um]cl.incl1
coVlkirYomeVnYrYavA	coVl]rt+kirY]pr+om]1pl+eVnYrYa]pl2+A]cl.intr2
coVlkirYomeVnYrYavAvawu	coVl]rt+kirY]pr+om]1pl+eVnYrYa]pl2+Avawu]cl.min
coVlkirYomeVnYrYAvawu	coVl]rt+kirY]pr+om]1pl+eVnYrYu]pl2+Avawu]cl.min
coVlkirYomeVnYrYave	coVl]rt+kirY]pr+om]1pl+eVnYrYa]pl2+e]cl.emph1
coVlkirYomeVnYrYavo	coVl]rt+kirY]pr+om]1pl+eVnYrYa]pl2+o]cl.intr1
coVlkirYomeVnYrYavum	coVl]rt+kirY]pr+om]1pl+eVnYrYa]pl2+um]cl.incl1
coVlkirYomeVnYrYe	coVl]rt+kirY]pr+om]1pl+eVnYrYu]pl2+e]cl.emph1
coVlkirYomeVnYrYo	coVl]rt+kirY]pr+om]1pl+eVnYrYu]pl2+o]cl.intr1
coVlkirYomeVnYrYu	coVl]rt+kirY]pr+om]1pl+eVnYrYu]pl2
coVlkirYomeVnYrYum	coVl]rt+kirY]pr+om]1pl+eVnYrYu]pl2+um]cl.incl1
coVlkirYomo	coVl]rt+kirY]pr+om]1pl+o]cl.intr1
coVlla	coVl]rt+a]inf
coVllakUtAwA	coVl]rt+a]inf+kUtAwu]pl1+ A]cl.intr2
coVllakUtAwe	coVl]rt+a]inf+kUtAwu]pl1+e]cl.emph1
coVllakUtAwo	coVl]rt+a]inf+kUtAwu]pl1+o]cl.intr1
coVllakUtAwu	coVl]rt+a]inf+kUtAwu]pl1
coVllakUtAwum	coVl]rt+a]inf+kUtAwu]pl1+ um]cl.incl1
coVllakUtAwumattum	coVl]rt+a]inf+kUtAwu]pl1+mattum]cl.rest
coVllakUtAwuwAnY	coVl]rt+a]inf+kUtAwu]pl1+wAnY]cl.emph2
coVllalAm	coVl]rt+a]inf+lAm]hort
coVllalAmA	coVl]rt+a]inf+lAm]hort+A]cl.intr2
coVllalAmammA	coVl]rt+a]inf+lAm]hort+ammA]voc.f
coVllalAmappA	coVl]rt+a]inf+lAm]hort+appA]voc.m
coVllalAmatA	coVl]rt+a]inf+lAm]hort+atA]voc.m
coVllalAmatI	coVl]rt+a]inf+lAm]hort+atI]voc.f
coVllalAmayyA	coVl]rt+a]inf+lAm]hort+ayyA]voc.mh
coVllalAme	coVl]rt+a]inf+lAm]hort+e]cl.emph1
coVllalAmeVnYa	coVl]rt+a]inf+lAm]hort+eVnYa]pl2
coVllalAmeVnYakUta	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+kUta]cl.incl2
coVllalAmeVnYamattum	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+mattum]cl.rest
coVllalAmeVnYappatuvawA	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+A]cl.intr2
coVllalAmeVnYappatuvawAvawu	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+Avawu]cl.min
coVllalAmeVnYappatuvawe	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+e]cl.emph1
coVllalAmeVnYappatuvawo	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+o]cl.intr1
coVllalAmeVnYappatuvawu	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2
coVllalAmeVnYappatuvawukUta	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllalAmeVnYappatuvawum	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+um]cl.incl1
coVllalAmeVnYappatuvawumattum	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+mattum]cl.rest
coVllalAmeVnYappatuvawuwAnY	coVl]rt+a]inf+lAm]hort+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllalAmeVnYavA	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+A]cl.intr2
coVllalAmeVnYavAvawu	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+Avawu]cl.min
coVllalAmeVnYave	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+e]cl.emph1
coVllalAmeVnYavo	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+o]cl.intr1
coVllalAmeVnYavum	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+um]cl.incl1
coVllalAmeVnYawAnY	coVl]rt+a]inf+lAm]hort+eVnYa]pl2+wAnY]cl.emph2
coVllalAmeVnYpawA	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+A]cl.intr2
coVllalAmeVnYpawAvawu	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+Avawu]cl.min
coVllalAmeVnYpawe	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+e]cl.emph1
coVllalAmeVnYpawo	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+o]cl.intr1
coVllalAmeVnYpawu	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2

coVllalAmeVnYpawukUta	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+kUta]cl.incl2
coVllalAmeVnYpawum	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+um]cl.incl1
coVllalAmeVnYpawumattum	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+mattum]cl.rest
coVllalAmeVnYpawuwAnY	coVl]rt+a]inf+lAm]hort+eVnYpawu]pl2+wAnY]cl.emph2
coVllalAmeVnYrYa	coVl]rt+a]inf+lAm]hort+eVnYrYa]pl2
coVllalAmeVnYrYA	coVl]rt+a]inf+lAm]hort+eVnYrYu]pl2+A]cl.intr2
coVllalAmeVnYrYAl	coVl]rt+a]inf+lAm]hort+eVnYrYAl]pl2
coVllalAmeVnYrYAlA	coVl]rt+a]inf+lAm]hort+eVnYrYAl]pl2+A]cl.intr2
coVllalAmeVnYrYAlAvawu	coVl]rt+a]inf+lAm]hort+eVnYrYAl]pl2+Avawu]cl.min
coVllalAmeVnYrYAle	coVl]rt+a]inf+lAm]hort+eVnYrYAl]pl2+e]cl.emph1
coVllalAmeVnYrYAlo	coVl]rt+a]inf+lAm]hort+eVnYrYAl]pl2+o]cl.intr1
coVllalAmeVnYrYAlum	coVl]rt+a]inf+lAm]hort+eVnYrYAl]pl2+um]cl.incl1
coVllalAmeVnYrYavA	coVl]rt+a]inf+lAm]hort+eVnYrYa]pl2+A]cl.intr2
coVllalAmeVnYrYavAvawu	coVl]rt+a]inf+lAm]hort+eVnYrYa]pl2+Avawu]cl.min
coVllalAmeVnYrYAvawu	coVl]rt+a]inf+lAm]hort+eVnYrYu]pl2+Avawu]cl.min
coVllalAmeVnYrYave	coVl]rt+a]inf+lAm]hort+eVnYrYa]pl2+e]cl.emph1
coVllalAmeVnYrYavo	coVl]rt+a]inf+lAm]hort+eVnYrYa]pl2+o]cl.intr1
coVllalAmeVnYrYavum	coVl]rt+a]inf+lAm]hort+eVnYrYa]pl2+um]cl.incl1
coVllalAmeVnYrYe	coVl]rt+a]inf+lAm]hort+eVnYrYu]pl2+e]cl.emph1
coVllalAmeVnYrYo	coVl]rt+a]inf+lAm]hort+eVnYrYu]pl2+o]cl.intr1
coVllalAmeVnYrYu	coVl]rt+a]inf+lAm]hort+eVnYrYu]pl2
coVllalAmeVnYrYum	coVl]rt+a]inf+lAm]hort+eVnYrYu]pl2+um]cl.incl1
coVllalAmiru	coVl]rt+a]inf+lAm]hort+iru]aux
coVllalAmo	coVl]rt+a]inf+lAm]hort+o]cl.intr1
coVllalAmpAr	coVl]rt+a]inf+lAm]hort+pAr]aux
coVllalAmA	coVl]rt+a]inf+lAm]hort+A]cl.intr2
coVllAmal	coVl]rt+Amal]negvbppl
coVllAmalA	coVl]rt+Amal]negvbppl+A]cl.intr2
coVllAmalammA	coVl]rt+Amal]negvbppl+ammA]voc. f
coVllAmalappA	coVl]rt+Amal]negvbppl+appA]voc.m
coVllAmalArampi	coVl]rt+Amal]negvbppl+Arampi
coVllAmalatA	coVl]rt+Amal]negvbppl+atA]voc.m
coVllAmalatI	coVl]rt+Amal]negvbppl+atI]voc.f
coVllAmalayyA	coVl]rt+Amal]negvbppl+ayyA]voc.mh
coVllAmale	coVl]rt+Amal]negvbppl+e]cl.emph1
coVllAmaleVnYa	coVl]rt+Amal]negvbppl+eVnYa]pl2
coVllAmaleVnYavA	coVl]rt+Amal]negvbppl+eVnYa]pl2+A]cl.intr2
coVllAmaleVnYavAvawu	coVl]rt+Amal]negvbppl+eVnYa]pl2+Avawu]cl.min
coVllAmaleVnYave	coVl]rt+Amal]negvbppl+eVnYa]pl2+e]cl.emph1
coVllAmaleVnYavo	coVl]rt+Amal]negvbppl+eVnYa]pl2+o]cl.intr1
coVllAmaleVnYavum	coVl]rt+Amal]negvbppl+eVnYa]pl2+um]cl.incl1
coVllAmaleVnYpawA	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+A]cl.intr2
coVllAmaleVnYpawAvawu	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+Avawu]cl.min
coVllAmaleVnYpawe	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+e]cl.emph1
coVllAmaleVnYpawo	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+o]cl.intr1
coVllAmaleVnYpawu	coVl]rt+Amal]negvbppl+eVnYpawu]pl2
coVllAmaleVnYpawukUta	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+kUta]cl.incl2
coVllAmaleVnYpawum	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+um]cl.incl1
coVllAmaleVnYpawumattum	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+mattum]cl.rest
coVllAmaleVnYpawuwAnY	coVl]rt+Amal]negvbppl+eVnYpawu]pl2+wAnY]cl.emph2
coVllAmaleVnYrYa	coVl]rt+Amal]negvbppl+eVnYrYa]pl2
coVllAmaleVnYrYA	coVl]rt+Amal]negvbppl+eVnYrYu]pl2+A]cl.intr2
coVllAmaleVnYrYAl	coVl]rt+Amal]negvbppl+eVnYrYAl]pl2
coVllAmaleVnYrYAlA	coVl]rt+Amal]negvbppl+eVnYrYAl]pl2+A]cl.intr2
coVllAmaleVnYrYAlAvawu	coVl]rt+Amal]negvbppl+eVnYrYAl]pl2+Avawu]cl.min
coVllAmaleVnYrYAle	coVl]rt+Amal]negvbppl+eVnYrYAl]pl2+e]cl.emph1
coVllAmaleVnYrYAlo	coVl]rt+Amal]negvbppl+eVnYrYAl]pl2+o]cl.intr1
coVllAmaleVnYrYAlum	coVl]rt+Amal]negvbppl+eVnYrYAl]pl2+um]cl.incl1
coVllAmaleVnYrYavA	coVl]rt+Amal]negvbppl+eVnYrYa]pl2+A]cl.intr2
coVllAmaleVnYrYavAvawu	coVl]rt+Amal]negvbppl+eVnYrYa]pl2+Avawu]cl.min
coVllAmaleVnYrYAvawu	coVl]rt+Amal]negvbppl+eVnYrYu]pl2+Avawu]cl.min
coVllAmaleVnYrYave	coVl]rt+Amal]negvbppl+eVnYrYa]pl2+e]cl.emph1
coVllAmaleVnYrYavo	coVl]rt+Amal]negvbppl+eVnYrYa]pl2+o]cl.intr1
coVllAmaleVnYrYavum	coVl]rt+Amal]negvbppl+eVnYrYa]pl2+um]cl.incl1
coVllAmaleVnYrYe	coVl]rt+Amal]negvbppl+eVnYrYu]pl2+e]cl.emph1
coVllAmaleVnYrYo	coVl]rt+Amal]negvbppl+eVnYrYu]pl2+o]cl.intr1
coVllAmaleVnYrYu	coVl]rt+Amal]negvbppl+eVnYrYu]pl2
coVllAmaleVnYrYum	coVl]rt+Amal]negvbppl+eVnYrYu]pl2+um]cl.incl1

coVllAmaliru	coVl]rt+**Amal]negvbppl+iru]aux**
coVllAmalkita	coVl]rt+**Amal]negvbppl+kita]aux**
coVllAmalkoVtu	coVl]rt+**Amal]negvbppl+koVtu]aux**
coVllAmalo	coVl]rt+**Amal]negvbppl+o]cl.intr1**
coVllAmalpaNNu	coVl]rt+**Amal]negvbppl+paNNu]aux**
coVllAmalpAr	coVl]rt+**Amal]negvbppl+pAr]aux**
coVllAmalpo	coVl]rt+**Amal]negvbppl+po]aux**
coVllAmalA	coVl]rt+**Amal]negvbppl+A]cl.intr2**
coVllAmalvE	coVl]rt+**Amal]negvbppl+vE]aux**
coVllamAttAlY	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf
coVllamAttAlYA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+A]cl.intr2
coVllamAttAlYammA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+ammA]voc.f
coVllamAttAlYAnYAl	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+AnYAl]adm
coVllamAttAlYAnYAlpAr	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+AnYAl]adm+pAr]aux
coVllamAttAlYAnYAlpo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+AnYAl]adm+po]aux
coVllamAttAlYAnYAlvA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+AnYAl]adm+vA]aux
coVllamAttAlYAnYAlvitu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+AnYAl]adm+vitu]aux
coVllamAttAlYappA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+appA]voc.m
coVllamAttAlYatA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+atA]voc.m
coVllamAttAlYatI	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+atI]voc.f
coVllamAttAlYayyA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+ayyA]voc.mh
coVllamAttAlYe	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+e]cl.emph1
coVllamAttAlYeVnYa	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2
coVllamAttAlYeVnYakUta	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+kUta]cl.incl2
coVllamAttAlYeVnYamattum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+mattum]cl.rest
coVllamAttAlYeVnYappatuvawA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttAlYeVnYappatuvawAvawu	*coVl]rt+a]inf+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+Avawu]cl.min*
coVllamAttAlYeVnYappatuvawe	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttAlYeVnYappatuvawo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttAlYeVnYappatuvawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2
coVllamAttAlYeVnYappatuvawukUta	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttAlYeVnYappatuvawum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttAlYeVnYappatuvawumattum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttAlYeVnYappatuvawuwAnY	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttAlYeVnYavA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+A]cl.intr2
coVllamAttAlYeVnYavAvawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+Avawu]cl.min
coVllamAttAlYeVnYave	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+e]cl.emph1
coVllamAttAlYeVnYavo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+o]cl.intr1
coVllamAttAlYeVnYavum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+um]cl.incl1
coVllamAttAlYeVnYawAnY	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYa]pl2+wAnY]cl.emph2
coVllamAttAlYeVnYpawA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+A]cl.intr2
coVllamAttAlYeVnYpawAvawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+Avawu]cl.min
coVllamAttAlYeVnYpawe	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+e]cl.emph1
coVllamAttAlYeVnYpawo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+o]cl.intr1
coVllamAttAlYeVnYpawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2
coVllamAttAlYeVnYpawukUta	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttAlYeVnYpawum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+um]cl.incl1
coVllamAttAlYeVnYpawumattum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+mattum]cl.rest
coVllamAttAlYeVnYpawuwAnY	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttAlYeVnYrYa	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYa]pl2
coVllamAttAlYeVnYrYA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYu]pl2+A]cl.intr2
coVllamAttAlYeVnYrYAl	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYAl]pl2
coVllamAttAlYeVnYrYAlA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYAl]pl2+A]cl.intr2
coVllamAttAlYeVnYrYAlAvawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttAlYeVnYrYAle	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYAl]pl2+e]cl.emph1
coVllamAttAlYeVnYrYAlo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYAl]pl2+o]cl.intr1
coVllamAttAlYeVnYrYAlum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYAl]pl2+um]cl.incl1
coVllamAttAlYeVnYrYavA	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYa]pl2+A]cl.intr2
coVllamAttAlYeVnYrYavAvawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYa]pl2+Avawu]cl.min
coVllamAttAlYeVnYrYAvawu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYu]pl2+Avawu]cl.min
coVllamAttAlYeVnYrYave	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYa]pl2+e]cl.emph1
coVllamAttAlYeVnYrYavo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYa]pl2+o]cl.intr1
coVllamAttAlYeVnYrYavum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYa]pl2+um]cl.incl1
coVllamAttAlYeVnYrYe	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYu]pl2+e]cl.emph1
coVllamAttAlYeVnYrYo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYu]pl2+o]cl.intr1
coVllamAttAlYeVnYrYu	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYu]pl2
coVllamAttAlYeVnYrYum	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+eVnYrYu]pl2+um]cl.incl1
coVllamAttAlYo	coVl]rt+a]**inf**+mAtt]negfut+AlY]3sf+o]cl.intr1

coVllamAttAlYpAr coVl]rt+a]inf+mAtt]negfut+AlY]3sf+pAr]aux
coVllamAttAlYpo coVl]rt+a]inf+mAtt]negfut+AlY]3sf+po]aux
coVllamAttAlYvA coVl]rt+a]inf+mAtt]negfut+AlY]3sf+vA]aux
coVllamAttAlYvitu coVl]rt+a]inf+mAtt]negfut+AlY]3sf+vitu]aux
coVllamAttAnY coVl]rt+a]inf+mAtt]negfut+AnY]3sm
coVllamAttAnYA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+A]cl.intr2
coVllamAttAnYammA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+ammA]voc.f
coVllamAttAnYAnYAl coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm
coVllamAttAnYAnYAlpAr coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+pAr]aux
coVllamAttAnYAnYAlpo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+po]aux
coVllamAttAnYAnYAlvA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+vA]aux
coVllamAttAnYAnYAlvitu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+vitu]aux
coVllamAttAnYappA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+appA]voc.m
coVllamAttAnYatA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+atA]voc.m
coVllamAttAnYatI coVl]rt+a]inf+mAtt]negfut+AnY]3sm+atI]voc.f
coVllamAttAnYayyA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+ayyA]voc.mh
coVllamAttAnYe coVl]rt+a]inf+mAtt]negfut+AnY]3sm+e]cl.emph1
coVllamAttAnYeVnYa coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2
coVllamAttAnYeVnYakUta coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+kUta]cl.incl2
coVllamAttAnYeVnYamattum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+mattum]cl.rest
coVllamAttAnYeVnYappatuvawA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttAnYeVnYappatuvawAvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+AvawuJcl.min
coVllamAttAnYeVnYappatuvawe coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttAnYeVnYappatuvawo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttAnYeVnYappatuvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2
coVllamAttAnYeVnYappatuvawukUta coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttAnYeVnYappatuvawum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttAnYeVnYappatuvawumattum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttAnYeVnYappatuvawuwAnY coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttAnYeVnYavA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+A]cl.intr2
coVllamAttAnYeVnYavAvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+Avawu]cl.min
coVllamAttAnYeVnYave coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+e]cl.emph1
coVllamAttAnYeVnYavo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+o]cl.intr1
coVllamAttAnYeVnYavum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+um]cl.incl1
coVllamAttAnYeVnYawAnY coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+wAnY]cl.emph2
coVllamAttAnYeVnYpawA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+A]cl.intr2
coVllamAttAnYeVnYpawAvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+Avawu]cl.min
coVllamAttAnYeVnYpawe coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+e]cl.emph1
coVllamAttAnYeVnYpawo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+o]cl.intr1
coVllamAttAnYeVnYpawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2
coVllamAttAnYeVnYpawukUta coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttAnYeVnYpawum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+um]cl.incl1
coVllamAttAnYeVnYpawumattum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+mattum]cl.rest
coVllamAttAnYeVnYpawuwAnY coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttAnYeVnYrYa coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2
coVllamAttAnYeVnYrYA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+A]cl.intr2
coVllamAttAnYeVnYrYAl coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2
coVllamAttAnYeVnYrYAlA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+A]cl.intr2
coVllamAttAnYeVnYrYAlAvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttAnYeVnYrYAle coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+e]cl.emph1
coVllamAttAnYeVnYrYAlo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+o]cl.intr1
coVllamAttAnYeVnYrYAlum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+um]cl.incl1
coVllamAttAnYeVnYrYavA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+A]cl.intr2
coVllamAttAnYeVnYrYavAvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+Avawu]cl.min
coVllamAttAnYeVnYrYAvawu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+Avawu]cl.min
coVllamAttAnYeVnYrYave coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+e]cl.emph1
coVllamAttAnYeVnYrYavo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+o]cl.intr1
coVllamAttAnYeVnYrYavum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+um]cl.incl1
coVllamAttAnYeVnYrYe coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+e]cl.emph1
coVllamAttAnYeVnYrYo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+o]cl.intr1
coVllamAttAnYeVnYrYu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2
coVllamAttAnYeVnYrYum coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+um]cl.incl1
coVllamAttAnYo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+o]cl.intr1
coVllamAttAnYpAr coVl]rt+a]inf+mAtt]negfut+AnY]3sm+pAr]aux
coVllamAttAnYpo coVl]rt+a]inf+mAtt]negfut+AnY]3sm+po]aux
coVllamAttAnYvAvA coVl]rt+a]inf+mAtt]negfut+AnY]3sm+vA]vA
coVllamAttAnYvitu coVl]rt+a]inf+mAtt]negfut+AnY]3sm+vitu]aux
coVllamAttAr coVl]rt+a]inf+mAtt]negfut+Ar]3sh

coVllamAttAlYpAr	coVl]rt+a]inf+mAtt]negfut+AlY]3sf+pAr]aux
coVllamAttAlYpo	coVl]rt+a]inf+mAtt]negfut+AlY]3sf+po]aux
coVllamAttAlYvA	coVl]rt+a]inf+mAtt]negfut+AlY]3sf+vA]aux
coVllamAttAlYvitu	coVl]rt+a]inf+mAtt]negfut+AlY]3sf+vitu]aux
coVllamAttAnY	coVl]rt+a]inf+mAtt]negfut+AnY]3sm
coVllamAttAnYA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+A]cl.intr2
coVllamAttAnYammA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+ammA]voc.f
coVllamAttAnYAnYAl	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm
coVllamAttAnYAnYAlpAr	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+pAr]aux
coVllamAttAnYAnYAlpo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+po]aux
coVllamAttAnYAnYAlvA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+vA]aux
coVllamAttAnYAnYAlvitu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+AnYAl]adm+vitu]aux
coVllamAttAnYappA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+appA]voc.m
coVllamAttAnYatA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+atA]voc.m
coVllamAttAnYatI	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+atI]voc.f
coVllamAttAnYayyA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+ayyA]voc.mh
coVllamAttAnYe	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+e]cl.emph1
coVllamAttAnYeVnYa	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2
coVllamAttAnYeVnYakUta	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+kUta]cl.incl2
coVllamAttAnYeVnYamattum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+mattum]cl.rest
coVllamAttAnYeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttAnYeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttAnYeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttAnYeVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttAnYeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2
coVllamAttAnYeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttAnYeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttAnYeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttAnYeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttAnYeVnYavA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+A]cl.intr2
coVllamAttAnYeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+Avawu]cl.min
coVllamAttAnYeVnYave	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+e]cl.emph1
coVllamAttAnYeVnYavo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+o]cl.intr1
coVllamAttAnYeVnYavum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+um]cl.incl1
coVllamAttAnYeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYa]pl2+wAnY]cl.emph2
coVllamAttAnYeVnYpawA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+A]cl.intr2
coVllamAttAnYeVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+Avawu]cl.min
coVllamAttAnYeVnYpawe	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+e]cl.emph1
coVllamAttAnYeVnYpawo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+o]cl.intr1
coVllamAttAnYeVnYpawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2
coVllamAttAnYeVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttAnYeVnYpawum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+um]cl.incl1
coVllamAttAnYeVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+mattum]cl.rest
coVllamAttAnYeVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttAnYeVnYrYa	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2
coVllamAttAnYeVnYrYA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+A]cl.intr2
coVllamAttAnYeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2
coVllamAttAnYeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+A]cl.intr2
coVllamAttAnYeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttAnYeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+e]cl.emph1
coVllamAttAnYeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+o]cl.intr1
coVllamAttAnYeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYAl]pl2+um]cl.incl1
coVllamAttAnYeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+A]cl.intr2
coVllamAttAnYeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+Avawu]cl.min
coVllamAttAnYeVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+Avawu]cl.min
coVllamAttAnYeVnYrYave	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+e]cl.emph1
coVllamAttAnYeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+o]cl.intr1
coVllamAttAnYeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYa]pl2+um]cl.incl1
coVllamAttAnYeVnYrYe	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+e]cl.emph1
coVllamAttAnYeVnYrYo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+o]cl.intr1
coVllamAttAnYeVnYrYu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2
coVllamAttAnYeVnYrYum	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+eVnYrYu]pl2+um]cl.incl1
coVllamAttAnYo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+o]cl.intr1
coVllamAttAnYpAr	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+pAr]aux
coVllamAttAnYpo	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+po]aux
coVllamAttAnYvAvA	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+vA]vA
coVllamAttAnYvitu	coVl]rt+a]inf+mAtt]negfut+AnY]3sm+vitu]aux
coVllamAttAr	coVl]rt+a]inf+mAtt]negfut+Ar]3sh

coVllamAttArA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+A]cl.intr2
coVllamAttArammA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+ammA]voc.f
coVllamAttArAnYAl	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+AnYAl]adm
coVllamAttArAnYAlpAr	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+AnYAl]adm+pAr]aux
coVllamAttArAnYAlpo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+AnYAl]adm+po]aux
coVllamAttArAnYAlvA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+AnYAl]adm+vA]aux
coVllamAttArAnYAlvitu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+AnYAl]adm+vitu]aux
coVllamAttArappA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+appA]voc.m
coVllamAttAratA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+atA]voc.m
coVllamAttAratI	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+atI]voc.f
coVllamAttArayyA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+ayyA]voc.mh
coVllamAttAre	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+e]cl.emph1
coVllamAttAreVnYa	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2
coVllamAttAreVnYakUta	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+kUta]cl.incl2
coVllamAttAreVnYamattum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+mattum]cl.rest
coVllamAttAreVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttAreVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttAreVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttAreVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttAreVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2
coVllamAttAreVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttAreVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttAreVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttAreVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttAreVnYavA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+A]cl.intr2
coVllamAttAreVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+Avawu]cl.min
coVllamAttAreVnYave	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+e]cl.emph1
coVllamAttAreVnYavo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+o]cl.intr1
coVllamAttAreVnYavum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+um]cl.incl1
coVllamAttAreVnYawAnY	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYa]pl2+wAnY]cl.emph2
coVllamAttAreVnYpawA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+A]cl.intr2
coVllamAttAreVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+Avawu]cl.min
coVllamAttAreVnYpawe	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+e]cl.emph1
coVllamAttAreVnYpawo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+o]cl.intr1
coVllamAttAreVnYpawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2
coVllamAttAreVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttAreVnYpawum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+um]cl.incl1
coVllamAttAreVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+mattum]cl.rest
coVllamAttAreVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttAreVnYrYa	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYa]pl2
coVllamAttAreVnYrYA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYu]pl2+A]cl.intr2
coVllamAttAreVnYrYAl	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYAl]pl2
coVllamAttAreVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYAl]pl2+A]cl.intr2
coVllamAttAreVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttAreVnYrYAle	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYAl]pl2+e]cl.emph1
coVllamAttAreVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYAl]pl2+o]cl.intr1
coVllamAttAreVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYAl]pl2+um]cl.incl1
coVllamAttAreVnYrYavA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYa]pl2+A]cl.intr2
coVllamAttAreVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYa]pl2+Avawu]cl.min
coVllamAttAreVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYu]pl2+Avawu]cl.min
coVllamAttAreVnYrYave	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYa]pl2+e]cl.emph1
coVllamAttAreVnYrYavo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYa]pl2+o]cl.intr1
coVllamAttAreVnYrYavum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYa]pl2+um]cl.incl1
coVllamAttAreVnYrYe	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYu]pl2+e]cl.emph1
coVllamAttAreVnYrYo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYu]pl2+o]cl.intr1
coVllamAttAreVnYrYu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYu]pl2
coVllamAttAreVnYrYum	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+eVnYrYu]pl2+um]cl.incl1
coVllamAttArkalY	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h
coVllamAttArkalYA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+A]cl.intr2
coVllamAttArkalYammA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+ammA]voc.f
coVllamAttArkalYAnYAl	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+AnYAl]adm
coVllamAttArkalYAnYAlpAr	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+AnYAl]adm+pAr]aux
coVllamAttArkalYAnYAlpo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+AnYAl]adm+po]aux
coVllamAttArkalYAnYAlvA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+AnYAl]adm+vA]aux
coVllamAttArkalYAnYAlvitu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+AnYAl]adm+vitu]aux
coVllamAttArkalYappA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+appA]voc.m
coVllamAttArkalYatA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+atA]voc.m
coVllamAttArkalYatI	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+atI]voc.f

coVllamAttArkalYayyA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+ayyA]voc.mh
coVllamAttArkalYe	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+e]cl.emph1
coVllamAttArkalYeVnYa	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2
coVllamAttArkalYeVnYakUta	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+kUta]cl.incl2
coVllamAttArkalYeVnYamattum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+mattum]cl.rest
coVllamAttArkalYeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttArkalYeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttArkalYeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttArkalYeVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttArkalYeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2
coVllamAttArkalYeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttArkalYeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttArkalYeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttArkalYeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttArkalYeVnYavA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+A]cl.intr2
coVllamAttArkalYeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+Avawu]cl.min
coVllamAttArkalYeVnYave	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+e]cl.emph1
coVllamAttArkalYeVnYavo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+o]cl.intr1
coVllamAttArkalYeVnYavum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+um]cl.incl1
coVllamAttArkalYeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYa]pl2+wAnY]cl.emph2
coVllamAttArkalYeVnYpawA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+A]cl.intr2
coVllamAttArkalYeVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+Avawu]cl.min
coVllamAttArkalYeVnYpawe	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+e]cl.emph1
coVllamAttArkalYeVnYpawo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+o]cl.intr1
coVllamAttArkalYeVnYpawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2
coVllamAttArkalYeVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttArkalYeVnYpawum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+um]cl.incl1
coVllamAttArkalYeVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+mattum]cl.rest
coVllamAttArkalYeVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttArkalYeVnYrYa	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYa]pl2
coVllamAttArkalYeVnYrYA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYu]pl2+A]cl.intr2
coVllamAttArkalYeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYAl]pl2
coVllamAttArkalYeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYAl]pl2+A]cl.intr2
coVllamAttArkalYeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttArkalYeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYAl]pl2+e]cl.emph1
coVllamAttArkalYeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYAl]pl2+o]cl.intr1
coVllamAttArkalYeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYAl]pl2+um]cl.incl1
coVllamAttArkalYeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYa]pl2+A]cl.intr2
coVllamAttArkalYeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYa]pl2+Avawu]cl.min
coVllamAttArkalYeVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYu]pl2+Avawu]cl.min
coVllamAttArkalYeVnYrYave	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYa]pl2+e]cl.emph1
coVllamAttArkalYeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYa]pl2+o]cl.intr1
coVllamAttArkalYeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYa]pl2+um]cl.incl1
coVllamAttArkalYeVnYrYe	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYu]pl2+e]cl.emph1
coVllamAttArkalYeVnYrYo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYu]pl2+o]cl.intr1
coVllamAttArkalYeVnYrYu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYu]pl2
coVllamAttArkalYeVnYrYum	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+eVnYrYu]pl2+um]cl.incl1
coVUamAttArkalYo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+o]cl.intr1
coVllamAttArkalYpAr	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+pAr]aux
coVllamAttArkalYpo	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+po]aux
coVllamAttArkalYvA	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+vA]aux
coVllamAttArkalYvitu	coVl]rt+a]inf+mAtt]negfut+ArkalY]3p/h+vitu]aux
coVllamAttAro	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+o]cl.intr1
coVllamAttArpAr	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+pAr]aux
coVllamAttArpo	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+po]aux
coVllamAttArvA	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+vA]aux
coVllamAttArvitu	coVl]rt+a]inf+mAtt]negfut+Ar]3sh+vitu]aux
coVllamAttAy	coVl]rt+a]inf+mAtt]negfut+Ay]2s
coVllamAttAyA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+A]cl.intr2
coVllamAttAyammA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+ammA]voc.f
coVllamAttAyAnYAl	coVl]rt+a]inf+mAtt]negfut+Ay]2s+AnYAl]adm
coVllamAttAyAnYAlpAr	coVl]rt+a]inf+mAtt]negfut+Ay]2s+AnYAl]adm+pAr]aux
coVllamAttAyAnYAlpo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+AnYAl]adm+po]aux
coVllamAttAyAnYAlvA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+AnYAl]adm+vA]aux
coVllamAttAyAnYAlvitu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+AnYAl]adm+vitu]aux
coVllamAttAyappA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+appA]voc.m
coVllamAttAyatA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+atA]voc.m
coVllamAttAyatI	coVl]rt+a]inf+mAtt]negfut+Ay]2s+atI]voc.f

coVllamAttAyayyA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+ayyA]voc.mh
coVllamAttAye	coVl]rt+a]inf+mAtt]negfut+Ay]2s+e]cl.emph1
coVllamAttAyeVnYa	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2
coVllamAttAyeVnYakUta	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+kUta]cl.incl2
coVllamAttAyeVnYamattum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+mattum]cl.rest
coVllamAttAyeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttAyeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttAyeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttAyeVnYappatuvawo	*coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+o]cl.intr1*
coVllamAttAyeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2
coVllamAttAyeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttAyeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttAyeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttAyeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttAyeVnYavA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+A]cl.intr2
coVllamAttAyeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+Avawu]cl.min
coVllamAttAyeVnYave	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+e]cl.emph1
coVllamAttAyeVnYavo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+o]cl.intr1
coVllamAttAyeVnYavum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+um]cl.incl1
coVllamAttAyeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYa]pl2+wAnY]cl.emph2
coVllamAttAyeVnYpawA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+A]cl.intr2
coVllamAttAyeVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+Avawu]cl.min
coVllamAttAyeVnYpawe	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+e]cl.emph1
coVllamAttAyeVnYpawo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+o]cl.intr1
coVllamAttAyeVnYpawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2
coVllamAttAyeVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttAyeVnYpawum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+um]cl.incl1
coVllamAttAyeVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+mattum]cl.rest
coVllamAttAyeVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttAyeVnYrYa	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYa]pl2
coVllamAttAyeVnYrYA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYu]pl2+A]cl.intr2
coVllamAttAyeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYAl]pl2
coVllamAttAyeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYAl]pl2+A]cl.intr2
coVllamAttAyeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttAyeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYAl]pl2+e]cl.emph1
coVllamAttAyeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYAl]pl2+o]cl.intr1
coVllamAttAyeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYAl]pl2+um]cl.incl1
coVllamAttAyeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYa]pl2+A]cl.intr2
coVllamAttAyeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYa]pl2+Avawu]cl.min
coVllamAttAyeVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYu]pl2+Avawu]cl.min
coVllamAttAyeVnYrYave	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYa]pl2+e]cl.emph1
coVllamAttAyeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYa]pl2+o]cl.intr1
coVllamAttAyeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYa]pl2+um]cl.incl1
coVllamAttAyeVnYrYe	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYu]pl2+e]cl.emph1
coVllamAttAyeVnYrYo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYu]pl2+o]cl.intr1
coVllamAttAyeVnYrYu	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYu]pl2
coVllamAttAyeVnYrYum	coVl]rt+a]inf+mAtt]negfut+Ay]2s+eVnYrYu]pl2+um]cl.incl1
coVllamAttAyo	coVl]rt+a]inf+mAtt]negfut+Ay]2s+o]cl.intr1
coVllamAttelY	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br
coVllamAttelYA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+A]cl.intr2
coVllamAttelYammA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+ammA]voc.f
coVllamAttelYAnYAl	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+AnYAl]adm
coVllamAttelYappA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+appA]voc.m
coVllamAttelYatA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+atA]voc.m
coVllamAttelYatI	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+atI]voc.f
coVllamAttelYayyA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+ayyA]voc.mh
coVllamAttelYe	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+e]cl.emph1
coVllamAttelYeVnYa	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2
coVllamAttelYeVnYakUta	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+kUta]cl.incl2
coVllamAttelYeVnYamattum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+*mattum*]cl.*rest*
coVllamAttelYeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttelYeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttelYeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttelYeVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttelYeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2
coVllamAttelYeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttelYeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttelYeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+mattum]cl.rest

coVllamAttelYeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttelYeVnYavA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+A]cl.intr2
coVllamAttelYeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+Avawu]cl.min
coVllamAttelYeVnYave	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+e]cl.emph1
coVllamAttelYeVnYavo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+o]cl.intr1
coVllamAttelYeVnYavum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+um]cl.incl1
coVllamAttelYeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYa]pl2+wAnY]cl.emph2
coVllamAttelYeVnYpawA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+A]cl.intr2
coVllamAttelYeVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+Avawu]cl.min
coVllamAttelYeVnYpawe	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+e]cl.emph1
coVllamAttelYeVnYpawo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+o]cl.intr1
coVllamAttelYeVnYpawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2
coVllamAttelYeVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttelYeVnYpawum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+um]cl.incl1
coVllamAttelYeVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+mattum]cl.rest
coVllamAttelYeVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttelYeVnYrYa	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYa]pl2
coVllamAttelYeVnYrYA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYu]pl2+A]cl.intr2
coVllamAttelYeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYAl]pl2
coVllamAttelYeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYAl]pl2+A]cl.intr2
coVllamAttelYeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttelYeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYAl]pl2+e]cl.emph1
coVllamAttelYeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYAl]pl2+o]cl.intr1
coVllamAttelYeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYAl]pl2+um]cl.incl1
coVllamAttelYeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYa]pl2+A]cl.intr2
coVllamAttelYeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYa]pl2+Avawu]cl.min
coVllamAttelYeVnYrYavawu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYu]pl2+Avawu]cl.min
coVllamAttelYeVnYrYave	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYa]pl2+e]cl.emph1
coVllamAttelYeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYa]pl2+o]cl.intr1
coVllamAttelYeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYa]pl2+um]cl.incl1
coVllamAttelYeVnYrYe	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYu]pl2+e]cl.emph1
coVllamAttelYeVnYrYo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYu]pl2+o]cl.intr1
coVllamAttelYeVnYrYu	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYu]pl2
coVllamAttelYeVnYrYum	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+eVnYrYu]pl2+um]cl.incl1
coVllamAttelYo	coVl]rt+a]inf+mAtt]negfut+elY]2sh.br+o]cl.intr1
coVllamAttenY	coVl]rt+a]inf+mAtt]negfut+enY]1s
coVllamAttenYA	coVl]rt+a]inf+mAtt]negfut+enY]1s+A]cl.intr2
coVllamAttenYammA	coVl]rt+a]inf+mAtt]negfut+enY]1s+ammA]voc.f
coVllamAttenYAnYAl	coVl]rt+a]inf+mAtt]negfut+enY]1s+AnYAl]adm
coVllamAttenYAnYAlpAr	coVl]rt+a]inf+mAtt]negfut+enY]1s+AnYAl]adm+pAr]aux
coVllamAttenYAnYAlpo	coVl]rt+a]inf+mAtt]negfut+enY]1s+AnYAl]adm+po]aux
coVllamAttenYAnYAlvA	coVl]rt+a]inf+mAtt]negfut+enY]1s+AnYAl]adm+vA]aux
coVllamAttenYAnYAlvitu	coVl]rt+a]inf+mAtt]negfut+enY]1s+AnYAl]adm+vitu]aux
coVllamAttenYappA	coVl]rt+a]inf+mAtt]negfut+enY]1s+appA]voc.m
coVllamAttenYatA	coVl]rt+a]inf+mAtt]negfut+enY]1s+atA]voc.m
coVllamAttenYatI	coVl]rt+a]inf+mAtt]negfut+enY]1s+atI]voc.f
coVllamAttenYayyA	coVl]rt+a]inf+mAtt]negfut+enY]1s+ayyA]voc.mh
coVllamAttenYe	coVl]rt+a]inf+mAtt]negfut+enY]1s+e]cl.emph1
coVllamAttenYeVnYa	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2
coVllamAttenYeVnYakUta	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+kUta]cl.incl2
coVllamAttenYeVnYamattum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+mattum]cl.rest
coVllamAttenYeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttenYeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttenYeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttenYeVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttenYeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2
coVllamAttenYeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttenYeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttenYeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttenYeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttenYeVnYavA	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+A]cl.intr2
coVllamAttenYeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+Avawu]cl.min
coVllamAttenYeVnYave	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+e]cl.emph1
coVllamAttenYeVnYavo	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+o]cl.intr1
coVllamAttenYeVnYavum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+um]cl.incl1
coVllamAttenYeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYa]pl2+wAnY]cl.emph2
coVllamAttenYeVnYpawA	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+A]cl.intr2
coVllamAttenYeVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+Avawu]cl.min

coVllamAttenYeVnYpawe	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+e]cl.emph1
coVllamAttenYeVnYpawo	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+o]cl.intr1
coVllamAttenYeVnYpawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2
coVllamAttenYeVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttenYeVnYpawum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+um]cl.incl1
coVllamAttenYeVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+mattum]cl.rest
coVllamAttenYeVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttenYeVnYrYa	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYa]pl2
coVllamAttenYeVnYrYA	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYu]pl2+A]cl.intr2
coVllamAttenYeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYAl]pl2
coVllamAttenYeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYAl]pl2+A]cl.intr2
coVllamAttenYeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttenYeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYAl]pl2+e]cl.emph1
coVllamAttenYeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYAl]pl2+o]cl.intr1
coVllamAttenYeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYAl]pl2+um]cl.incl1
coVllamAttenYeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYa]pl2+A]cl.intr2
coVllamAttenYeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYa]pl2+Avawu]cl.min
coVllamAttenYeVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYu]pl2+Avawu]cl.min
coVllamAttenYeVnYrYave	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYa]pl2+e]cl.emph1
coVllamAttenYeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYa]pl2+o]cl.intr1
coVllamAttenYeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYa]pl2+um]cl.incl1
coVllamAttenYeVnYrYe	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYu]pl2+e]cl.emph1
coVllamAttenYeVnYrYo	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYu]pl2+o]cl.intr1
coVllamAttenYeVnYrYu	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYu]pl2
coVllamAttenYeVnYrYum	coVl]rt+a]inf+mAtt]negfut+enY]1s+eVnYrYu]pl2+um]cl.incl1
coVllamAttenYo	coVl]rt+a]inf+mAtt]negfut+enY]1s+o]cl.intr1
coVllamAttenYpAr	coVl]rt+a]inf+mAtt]negfut+enY]1s+pAr]aux
coVllamAttenYpo	coVl]rt+a]inf+mAtt]negfut+enY]1s+po]aux
coVllamAttenYvA	coVl]rt+a]inf+mAtt]negfut+enY]1s+vA]aux
coVllamAttenYvitu	coVl]rt+a]inf+mAtt]negfut+enY]1s+vitu]aux
coVllamAttIr	coVl]rt+a]inf+mAtt]negfut+Ir
coVllamAttIrA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+A]cl.intr2
coVllamAttIrammA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+ammA]voc.f
coVllamAttIrAnYAl	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+AnYAl]adm
coVllamAttIrappA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+appA]voc.m
coVllamAttIratA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+atA]voc.m
coVllamAttIratI	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+atI]voc.f
coVllamAttIrayyA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+ayyA]voc.mh
coVllamAttIre	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+e]cl.emph1
coVllamAttIreVnYa	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2
coVllamAttIreVnYakUta	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+kUta]cl.incl2
coVllamAttIreVnYamattum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+mattum]cl.rest
coVllamAttIreVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttIreVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttIreVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttIreVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttIreVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2
coVllamAttIreVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttIreVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttIreVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttIreVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttIreVnYavA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+A]cl.intr2
coVllamAttIreVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+Avawu]cl.min
coVllamAttIreVnYave	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+e]cl.emph1
coVllamAttIreVnYavo	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+o]cl.intr1
coVllamAttIreVnYavum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+um]cl.incl1
coVllamAttIreVnYawAnY	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYa]pl2+wAnY]cl.emph2
coVllamAttIreVnYpawA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+A]cl.intr2
coVllamAttIreVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+Avawu]cl.min
coVllamAttIreVnYpawe	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+e]cl.emph1
coVllamAttIreVnYpawo	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+o]cl.intr1
coVllamAttIreVnYpawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2
coVllamAttIreVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttIreVnYpawum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+um]cl.incl1
coVllamAttIreVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+mattum]cl.rest
coVllamAttIreVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttIreVnYrYa	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYa]pl2
coVllamAttIreVnYrYA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYu]pl2+A]cl.intr2

coVllamAttIreVnYrYAl	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYAl]pl2
coVllamAttIreVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYAl]pl2+A]cl.intr2
coVllamAttIreVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttIreVnYrYAle	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYAl]pl2+e]cl.emph1
coVllamAttIreVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYAl]pl2+o]cl.intr1
coVllamAttIreVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYAl]pl2+um]cl.incl1
coVllamAttIreVnYrYavA	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYa]pl2+A]cl.intr2
coVllamAttIreVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYa]pl2+Avawu]cl.min
coVllamAttIreVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYu]pl2+Avawu]cl.min
coVllamAttIreVnYrYave	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYa]pl2+e]cl.emph1
coVllamAttIreVnYrYavo	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYa]pl2+o]cl.intr1
coVllamAttIreVnYrYavum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYa]pl2+um]cl.incl1
coVllamAttIreVnYrYe	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYu]pl2+e]cl.emph1
coVllamAttIreVnYrYo	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYu]pl2+o]cl.intr1
coVllamAttIreVnYrYu	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYu]pl2
coVllamAttIreVnYrYum	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/p+eVnYrYu]pl2+um]cl.incl1
coVllamAttIrkalY	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h
coVllamAttIrkalYA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+A]cl.intr2
coVllamAttIrkalYammA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+ammA]voc.f
coVllamAttIrkalYAnYAl	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+AnYAl]adm
coVllamAttIrkalYappA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+appA]voc.m
coVllamAttIrkalYatA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+atA]voc.m
coVllamAttIrkalYatl	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+atl]voc.f
coVllamAttIrkalYayyA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+ayyA]voc.mh
coVllamAttIrkalYe	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+e]cl.emph1
coVllamAttIrkalYeVnYa	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2
coVllamAttIrkalYeVnYakUta	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+kUta]cl.incl2
coVllamAttIrkalYeVnYamattum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+mattum]cl.rest
coVllamAttIrkalYeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttIrkalYeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttIrkalYeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttIrkalYeVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttIrkalYeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2
coVllamAttIrkalYeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttIrkalYeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttIrkalYeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttIrkalYeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttIrkalYeVnYavA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+A]cl.intr2
coVllamAttIrkalYeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+Avawu]cl.min
coVllamAttIrkalYeVnYave	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+e]cl.emph1
coVllamAttIrkalYeVnYavo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+o]cl.intr1
coVllamAttIrkalYeVnYavum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+um]cl.incl1
coVllamAttIrkalYeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYa]pl2+wAnY]cl.emph2
coVllamAttIrkalYeVnYawA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+A]cl.intr2
coVllamAttIrkalYeVnYawAvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+Avawu]cl.min
coVllamAttIrkalYeVnYawe	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+e]cl.emph1
coVllamAttIrkalYeVnYawo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+o]cl.intr1
coVllamAttIrkalYeVnYawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2
coVllamAttIrkalYeVnYawukUta	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+kUta]cl.incl2
coVllamAttIrkalYeVnYawum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+um]cl.incl1
coVllamAttIrkalYeVnYawumattum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+mattum]cl.rest
coVllamAttIrkalYeVnYawuwAnY	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYapwu]pl2+wAnY]cl.emph2
coVllamAttIrkalYeVnYrYa	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYa]pl2
coVllamAttIrkalYeVnYrYA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYu]pl2+A]cl.intr2
coVllamAttIrkalYeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYAl]pl2
coVllamAttIrkalYeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYAl]pl2+A]cl.intr2
coVllamAttIrkalYeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttIrkalYeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYAl]pl2+e]cl.emph1
coVllamAttIrkalYeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYAl]pl2+o]cl.intr1
coVllamAttIrkalYeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYAl]pl2+um]cl.incl1
coVllamAttIrkalYeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYa]pl2+A]cl.intr2
coVllamAttIrkalYeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYa]pl2+Avawu]cl.min
coVllamAttIrkalYeVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYu]pl2+Avawu]cl.min
coVllamAttIrkalYeVnYrYave	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYa]pl2+e]cl.emph1
coVllamAttIrkalYeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYa]pl2+o]cl.intr1
coVllamAttIrkalYeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYa]pl2+um]cl.incl1
coVllamAttIrkalYeVnYrYe	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYu]pl2+e]cl.emph1
coVllamAttIrkalYeVnYrYo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYu]pl2+o]cl.intr1

coVllamAttIrkalYeVnYrYu	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYu]pl2
coVllamAttIrkalYeVnYrYum	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+eVnYrYu]pl2+um]cl.incl1
coVllamAttIrkalYo	coVl]rt+a]inf+mAtt]negfut+IrkalY]2p/h+o]cl.intr1
coVllamAttIr	coVl]rt+a]inf+mAtt]negfut+Ir]2shl/+o]cl.intr1
coVllamAttom	coVl]rt+a]inf+mAtt]negfut+om]1pl
coVllamAttomA	coVl]rt+a]inf+mAtt]negfut+om]1pl+A]cl.intr2
coVllamAttomammA	coVl]rt+a]inf+mAtt]negfut+om]1pl+ammA]voc.f
coVllamAttomAnYAl	coVl]rt+a]inf+mAtt]negfut+om]1pl+AnYAl]adm
coVllamAttomAnYAlpAr	coVl]rt+a]inf+mAtt]negfut+om]1pl+AnYAl]adm+pAr]aux
coVllamAttomAnYAlpo	coVl]rt+a]inf+mAtt]negfut+om]1pl+AnYAl]adm+po]aux
coVllamAttomAnYAlvA	coVl]rt+a]inf+mAtt]negfut+om]1pl+AnYAl]adm+vA]aux
coVllamAttomAnYAlvitu	coVl]rt+a]inf+mAtt]negfut+om]1pl+AnYAl]adm+vitu]aux
coVllamAttomappA	coVl]rt+a]inf+mAtt]negfut+om]1pl+appA]voc.m
coVllamAttomatA	coVl]rt+a]inf+mAtt]negfut+om]1pl+atA]voc.m
coVllamAttomatI	coVl]rt+a]inf+mAtt]negfut+om]1pl+atI]voc.f
coVllamAttomayyA	coVl]rt+a]inf+mAtt]negfut+om]1pl+ayyA]voc.mh
coVllamAttome	coVl]rt+a]inf+mAtt]negfut+om]1pl+e]cl.emph1
coVllamAttomeVnYa	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2
coVllamAttomeVnYakUta	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+kUta]cl.incl2
coVllamAttomeVnYamattum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+mattum]cl.rest
coVllamAttomeVnYappatuvawA	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+A]cl.intr2
coVllamAttomeVnYappatuvawAvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+Avawu]cl.min
coVllamAttomeVnYappatuvawe	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+e]cl.emph1
coVllamAttomeVnYappatuvawo	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+o]cl.intr1
coVllamAttomeVnYappatuvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2
coVllamAttomeVnYappatuvawukUta	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllamAttomeVnYappatuvawum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+um]cl.incl1
coVllamAttomeVnYappatuvawumattum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+mattum]cl.rest
coVllamAttomeVnYappatuvawuwAnY	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllamAttomeVnYavA	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+A]cl.intr2
coVllamAttomeVnYavAvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+Avawu]cl.min
coVllamAttomeVnYave	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+e]cl.emph1
coVllamAttomeVnYavo	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+o]cl.intr1
coVllamAttomeVnYavum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+um]cl.incl1
coVllamAttomeVnYawAnY	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYa]pl2+wAnY]cl.emph2
coVllamAttomeVnYpawA	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+A]cl.intr2
coVllamAttomeVnYpawAvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+Avawu]cl.min
coVllamAttomeVnYpawe	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+e]cl.emph1
coVllamAttomeVnYpawo	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+o]cl.intr1
coVllamAttomeVnYpawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2
coVllamAttomeVnYpawukUta	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+kUta]cl.incl2
coVllamAttomeVnYpawum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+um]cl.incl1
coVllamAttomeVnYpawumattum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+mattum]cl.rest
coVllamAttomeVnYpawuwAnY	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYpawu]pl2+wAnY]cl.emph2
coVllamAttomeVnYrYa	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYa]pl2
coVllamAttomeVnYrYA	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYu]pl2+A]cl.intr2
coVllamAttomeVnYrYAl	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYAl]pl2
coVllamAttomeVnYrYAlA	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYAl]pl2+A]cl.intr2
coVllamAttomeVnYrYAlAvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYAl]pl2+Avawu]cl.min
coVllamAttomeVnYrYAle	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYAl]pl2+e]cl.emph1
coVllamAttomeVnYrYAlo	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYAl]pl2+o]cl.intr1
coVllamAttomeVnYrYAlum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYAl]pl2+um]cl.incl1
coVllamAttomeVnYrYavA	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYa]pl2+A]cl.intr2
coVllamAttomeVnYrYavAvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYa]pl2+Avawu]cl.min
coVllamAttomeVnYrYAvawu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYu]pl2+Avawu]cl.min
coVllamAttomeVnYrYave	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYa]pl2+e]cl.emph1
coVllamAttomeVnYrYavo	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYa]pl2+o]cl.intr1
coVllamAttomeVnYrYavum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYa]pl2+um]cl.incl1
coVllamAttomeVnYrYe	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYu]pl2+e]cl.emph1
coVllamAttomeVnYrYo	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYu]pl2+o]cl.intr1
coVllamAttomeVnYrYu	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYu]pl2
coVllamAttomeVnYrYum	coVl]rt+a]inf+mAtt]negfut+om]1pl+eVnYrYu]pl2+um]cl.incl1
coVllamAttomo	coVl]rt+a]inf+mAtt]negfut+om]1pl+o]cl.intr1
coVllamAttompAr	coVl]rt+a]inf+mAtt]negfut+om]1pl+pAr]aux
coVllamAttompo	coVl]rt+a]inf+mAtt]negfut+om]1pl+po]aux
coVllamAttomvA	coVl]rt+a]inf+mAtt]negfut+om]1pl+vA]aux
coVllamAttomvitu	coVl]rt+a]inf+mAtt]negfut+om]1pl+vitu]aux
coVllamutiyAwA	coVl]rt+a]inf+mutiyAwu]aux+A]cl.intr2

coVllamutiyAwe	coVl]rt+a]inf+mutiyAwu]aux+e]cl.emph1
coVllamutiyAwo	coVl]rt+a]inf+mutiyAwu]aux+o]cl.intr1
coVllamutiyAwu	coVl]rt+a]inf+mutiyAwu]aux
coVUamutiyAwum	coVl]rt+a]inf+mutiyAwu]aux+um]cl.incl1
coVllamutiyAwuwAnY	coVl]rt+a]inf+mutiyAwu]aux+wAnY]cl.emph2
coVllamutiyum	coVl]rt+a]inf+mutiyum]aux
coVllam utiyumA	coVl]rt+a]inf+mutiyum]aux+A]cl.intr2
coVUamutiyume	coVl]rt+a]inf+mutiyum]aux+e]cl.emph1
coVllam utiyumo	coVl]rt+a]inf+mutiyum]aux+o]cl.intr1
coVllamutiyumum	coVl]rt+a]inf+mutiyum]aux+um]cl.incl1
coVllam utiyumwAnY	coVl]rt+a]inf+mutiyum]aux+wAnY]cl.emph2
coVUappA	coVl]rt+appA]voc.m
coVllaveNtAm	coVl]rt+a]inf+veNtAm]aux
coVllaveNtAmA	coVl]rt+a]inf+veNtAm]aux+A]cl.intr2
coVllaveNtAme -	coVl]rt+a]inf+veNtAm]aux+e]cl.emph1
coVllaveNtAmo	coVl]rt+a]inf+veNtAm]aux+o]cl.intr1
coVllaveNtAmpo	coVl]rt+a]inf+veNtAm]aux+po]aux
coVllaveNtAmum	coVl]rt+a]inf+veNtAm]aux+um]cl.incl1
coVllaveNtAmvA	coVl]rt+a]inf+veNtAm]aux+vA]aux
coVllaveNtAmvitu	coVl]rt+a]inf+veNtAm]aux+vitu]aux
coVllaveNtAmwAnY	coVl]rt+a]inf+veNtAm]aux+wAnY]cl.emph2
coVUavcNtum	coVl]rt+a]inf+veNtum]aux
coVllaveNtumA	coVl]rt+a]inf+veNtum]aux+A]cl.intr2
coVllaveNtume	coVl]rt+a]inf+veNtum]aux+e]cl.emph1
coVllaveNtumo	coVl]rt+a]inf+veNtum]aux+o]cl.intr1
coVllaveNtumum	coVl]rt+a]inf+veNtum]aux+um]cl.incl1
coVllaveNtumwAnY	coVl]rt+a]inf+veNtum]aux+wAnY]cl.emph2
coVllavillE	coVl]rt+a]inf+illE]negpst
coVllavillEyAnYAliru	coVl]rt+a]inf+illE]negpst+AnYAl]adm+iru]aux
coVllavillEyAnYAlpAr	coVl]rt+a]inf+illE]negpst+AnYAl]adm+pAr]aux
coVllavillEyAnYAlpo	coVl]rt+a]inf+illE]negpst+AnYAl]adm+po]aux
coVllavillEyAnYAlvitu	coVl]rt+a]inf+illE]negpst+AnYAl]adm+vitu]aux
coVllavillEeVnYrYa	coVl]rt+a]inf+illE]negpst+eVnYrYa]pl2
coVllavillEeVnYrYavA	coVl]rt+a]inf+illE]negpst+eVnYrYa]pl2+A]cl.intr2
coVllavillEeVnYrYavAvawu	coVl]rt+a]inf+illE]negpst+eVnYrYa]pl2+Avawu]cl.min
coVllavillEeVnYrYave	coVl]rt+a]inf+illE]negpst+eVnYrYa]pl2+e]cl.emph1
coVllavillEeVnYrYavo	coVl]rt+a]inf+illE]negpst+eVnYrYa]pl2+o]cl.intr1
coVllavillEeVnYrYavum	coVl]rt+a]inf+illE]negpst+eVnYrYa]pl2+um]cl.incl1
coVllavillEpAr	coVl]rt+a]inf+illE]negpst+pAr]aux
coVUaviUEpo	coVl]rt+a]inf+illE]negpst+po]aux
coVllavillEyA	coVl]rt+a]inf+illE]negpst+A]cl.intr2
coVllavillEammA	coVl]rt+a]inf+illE]negpst+ammA]voc.f
coVllavillEappA	coVl]rt+a]inf+illE]negpst+appA]voc.m
coVllavillEatA	coVl]rt+a]inf+illE]negpst+atA]voc.m
coVllavillEatI	coVl]rt+a]inf+illE]negpst+atI]voc.f
coVllavillEayyA	coVl]rt+a]inf+illE]negpst+ayyA]voc.mh
coVllavillEe	coVl]rt+a]inf+illE]negpst+e]cl.emph1
coVllavillEeVnYa	coVl]rt+a]inf+illE]negpst+eVnYa]pl2
coVllavillEeVnYakUta	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+kUta]cl.incl2
coVllavillEeVnYamattum	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+mattum]cl.rest
coVllavillEeVnYappatuvawA	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+A]cl.intr2
coVllavillEeVnYappatuvawAvawu	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+Avawu]cl.min
coVllavillEeVnYappatuvawe	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+e]cl.emph1
coVllavillEeVnYappatuvawo	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+o]cl.intr1
coVllavillEeVnYappatuvawu	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2
coVllavillEeVnYappatuvawukUta	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllavillEeVnYappatuvawum	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+um]cl.incl1
coVllavillEeVnYappatuvawumattum	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+mattum]cl.rest
coVllavillEeVnYappatuvawuwAnY	coVl]rt+a]inf+illE]negpst+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllavillEeVnYavA	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+A]cl.intr2
coVllavillEeVnYavAvawu	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+Avawu]cl.min
coVllavillEeVnYave	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+e]cl.emph1
coVllavillEeVnYavo	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+o]cl.intr1
coVllavillEeVnYavum	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+um]cl.incl1
coVllavillEeVnYawAnY	coVl]rt+a]inf+illE]negpst+eVnYa]pl2+wAnY]cl.emph2
coVllavillEeVnYpawA	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+A]cl.intr2
coVllavillEeVnYpawAvawu	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+Avawu]cl.min
coVllavillEeVnYpawe	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+e]cl.emph1

coVllavillEeVnYpawo	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+o]cl.intr1
coVllavillEeVnYpawu	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2
coVllavillEeVnYpawukUta	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+kUta]cl.incl2
coVllavillEeVnYpawum	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+um]cl.incl1
coVllavillEeVnYpawumattum	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+mattum]cl.rest
coVllavillEeVnYpawuwAnY	coVl]rt+a]inf+illE]negpst+eVnYpawu]pl2+wAnY]cl.emph2
coVllavillEeVnYrYA	coVl]rt+a]inf+illE]negpst+eVnYrYu]pl2+A]cl.intr2
coVllavillEeVnYrYAl	coVl]rt+a]inf+illE]negpst+eVnYrYAl]pl2
coVllavillEeVnYrYAlA	coVl]rt+a]inf+illE]negpst+eVnYrYAl]pl2+A]cl.intr2
coVllavillEeVnYrYAlAvawu	coVl]rt+a]inf+illE]negpst+eVnYrYAl]pl2+Avawu]cl.min
coVllavillEeVnYrYAle	coVl]rt+a]inf+illE]negpst+eVnYrYAl]pl2+e]cl.emph1
coVllavillEeVnYrYAlo	coVl]rt+a]inf+illE]negpst+eVnYrYAl]pl2+o]cl.intr1
coVllavillEeVnYrYAlum	coVl]rt+a]inf+illE]negpst+eVnYrYAl]pl2+um]cl.incl1
coVllavillEeVnYrYAvawu	coVl]rt+a]inf+illE]negpst+eVnYrYu]pl2+Avawu]cl.min
coVllavillEeVnYrYe	coVl]rt+a]inf+illE]negpst+eVnYrYu]pl2+e]cl.emph1
coVllavillEeVnYrYo	coVl]rt+a]inf+illE]negpst+eVnYrYu]pl2+o]cl.intr1
coVllavillEeVnYrYu	coVl]rt+a]inf+illE]negpst+eVnYrYu]pl2
coVllavillEeVnYrYum	coVl]rt+a]inf+illE]negpst+eVnYrYu]pl2+um]cl.incl1
coVllavillEyo	coVl]rt+a]inf+illE]negpst+o]cl.intr1
coVllAvittAl	coVl]rt+AvittAl]negcdl
coVllAvittAleVnYpawA	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+A]cl.intr2
coVllAvittAleVnYpawAvawu	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+Avawu]cl.min
coVllAvittAleVnYpawe	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+e]cl.emph1
coVllAvittAleVnYpawo	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+o]cl.intr1
coVllAvittAleVnYpawu	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2
coVllAvittAleVnYpawukUta	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+kUta]cl.incl2
coVllAvittAleVnYpawum	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+um]cl.incl1
coVllAvittAleVnYpawumattum	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+mattum]cl.rest
coVllAvittAleVnYpawuwAnY	coVl]rt+AvittAl]negcdl+eVnYpawu]pl2+wAnY]cl.emph2
coVllAvittAlpAr	coVl]rt+AvittAl]negcdl+pAr]aux
coVllAvittAlpo	coVl]rt+AvittAl]negcdl+po]aux
coVllAwa	coVl]rt+Awa]negadjppl
coVlllAwA	coVl]rt+lAw+A]cl.intr2
coVllAwaveVnYrYAl	coVl]rt+Awa]negadjppl+eVnYrYAl]pl2
coVllAwaveVnYrYAlA	coVl]rt+Awa]negadjppl+eVnYrYAl]pl2+A]cl.intr2
coVllAwaveVnYrYAlAvawu	coVl]rt+Awa]negadjppl+eVnYrYAl]pl2+Avawu]cl.min
coVllAwaveVnYrYAle	coVl]rt+Awa]negadjppl+eVnYrYAl]pl2+e]cl.emph1
coVllAwaveVnYrYAlo	coVl]rt+Awa]negadjppl+eVnYrYAl]pl2+o]cl.intr1
coVllAwaveVnYrYAlum	coVl]rt+Awa]negadjppl+eVnYrYAl]pl2+um]cl.incl1
coVllAwapo	coVl]rt+Awa]negadjppl+po]aux
coVllAwapowA	coVl]rt+Awa]negadjppl+powu]adv+A]cl.intr2
coVllAwapowAvawu	coVl]rt+Awa]negadjppl+powu]adv+Avawu]cl.min
coVllAwapowe	coVl]rt+Awa]negadjppl+powu]adv+e]cl.emph1
coVllAwapowo	coVl]rt+Awa]negadjppl+powu]adv+o]cl.intr1
coVllAwapowu	coVl]rt+Awa]negadjppl+powu]adv
coVllAwapowukUta	coVl]rt+Awa]negadjppl+powu]adv+kUta]cl.incl2
coVllAwapowukUta	coVl]rt+Awa]negadjppl+powu]adv+kUta]cl.incl2
coVllAwapowum	coVl]rt+Awa]negadjppl+powu]adv+um]cl.incl1
coVllAwapowumattum	coVl]rt+Awa]negadjppl+powu]adv+mattum]cl.rest
coVllAwapowuwAnY	coVl]rt+Awa]negadjppl+powu]adv+wAnY]cl.emph2
coVllAwavA	coVl]rt+Awa]negadjppl+A]cl.intr2
coVllAwairu	coVl]rt+Awa]negadjppl+iru]aux
coVllAwe	coVl]rt+Aw]negfut+e]2s
coVllAweeVnYa	coVl]rt+Aw]proh+e]2s+eVnYa]pl2
coVllAweeVnYakUta	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+kUta]cl.incl2
coVllAweeVnYamattum	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+mattum]cl.rest
coVllAweeVnYappatuvawA	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+A]cl.intr2
coVllAweeVnYappatuvawAvawu	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+Avawu]cl.min
coVllAweeVnYappatuvawe	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+e]cl.emph1
coVllAweeVnYappatuvawo	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+o]cl.intr1
coVllAweeVnYappatuvawu	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2
coVllAweeVnYappatuvawukUta	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllAweeVnYappatuvawum	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+um]cl.incl1
coVllAweeVnYappatuvawumattum	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+mattum]cl.rest
coVllAweeVnYappatuvawuwAnY	coVl]rt+Aw]proh+e]2s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllAweeVnYavA	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+A]cl.intr2
coVllAweeVnYavAvawu	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+Avawu]cl.min
coVllAweeVnYave	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+e]cl.emph1

coVllAweeVnYavo	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+o]cl.intr1
coVllAweeVnYavum	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+um]cl.incl1
coVllAweeVnYawAnY	coVl]rt+Aw]proh+e]2s+eVnYa]pl2+wAnY]cl.emph2
coVllAweeVnYrYa	coVl]rt+Aw]proh+e]2s+eVnYrYa]pl2
coVllAweeVnYrYA	coVl]rt+Aw]proh+e]2s+eVnYrYu]pl2+A]cl.intr2
coVllAweeVnYrYAl	coVl]rt+Aw]proh+e]2s+eVnYrYAl]pl2
coVllAweeVnYrYAlA	coVl]rt+Aw]proh+e]2s+eVnYrYAl]pl2+A]cl.intr2
coVllAweeVnYrYAlAvawu	coVl]rt+Aw]proh+e]2s+eVnYrYAl]pl2+Avawu]cl.min
coVllAweeVnYrYAle	coVl]rt+Aw]proh+e]2s+eVnYrYAl]pl2+e]cl.emph1
coVllAweeVnYrYAlo	coVl]rt+Aw]proh+e]2s+eVnYrYAl]pl2+o]cl.intr1
coVllAweeVnYrYAlum	coVl]rt+Aw]proh+e]2s+eVnYrYAl]pl2+um]cl.incl1
coVllAweeVnYrYavA	coVl]rt+Aw]proh+e]2s+eVnYrYa]pl2+A]cl.intr2
coVllAweeVnYrYavAvawu	coVl]rt+Aw]proh+e]2s+eVnYrYa]pl2+Avawu]cl.min
coVllAweeVnYrYAvawu	coVl]rt+Aw]proh+e]2s+eVnYrYu]pl2+Avawu]cl.min
coVllAweeVnYrYave	coVl]rt+Aw]proh+e]2s+eVnYrYa]pl2+e]cl.emph1
coVllAweeVnYrYavo	coVl]rt+Aw]proh+e]2s+eVnYrYa]pl2+o]cl.intr1
coVllAweeVnYrYavum	coVl]rt+Aw]proh+e]2s+eVnYrYa]pl2+um]cl.incl1
coVllAweeVnYrYe	coVl]rt+Aw]proh+e]2s+eVnYrYu]pl2+e]cl.emph1
coVllAweeVnYrYo	coVl]rt+Aw]proh+e]2s+eVnYrYu]pl2+o]cl.intr1
coVllAweeVnYrYu	coVl]rt+Aw]proh+e]2s+eVnYrYu]pl2
coVllAweeVnYrYum	coVl]rt+Aw]proh+e]2s+eVnYrYu]pl2+um]cl.incl1
coVllAwoheiru	coVl]rt+Aw]proh+e]2s+iru]aux
coVllAwIr	coVl]rt+Aw]proh+Ir]2shl/p
coVllAwIreVnYa	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2
coVllAwIreVnYakUta	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+kUta]cl.incl2
coVllAwIreVnYamattum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+mattum]cl.rest
coVllAwIreVnYappatuvawA	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+A]cl.intr2
coVllAwIreVnYappatuvawAvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+Avawu]cl.min
coVllAwIreVnYappatuvawe	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+e]cl.emph1
coVllAwIreVnYappatuvawo	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+o]cl.intr1
coVllAwIreVnYappatuvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2
coVllAwIreVnYappatuvawukUta	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllAwIreVnYappatuvawum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+um]cl.incl1
coVllAwIreVnYappatuvawumattum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+mattum]cl.rest
coVllAwIreVnYappatuvawuwAnY	coVl]rt+Aw]proh+Ir]2shl/p+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllAwIreVnYavA	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+A]cl.intr2
coVllAwIreVnYavAvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+Avawu]cl.min
coVllAwIreVnYave	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+e]cl.emph1
coVllAwIreVnYavo	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+o]cl.intr1
coVllAwIreVnYavum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+um]cl.incl1
coVllAwIreVnYawAnY	coVl]rt+Aw]proh+Ir]2shl/p+eVnYa]pl2+wAnY]cl.emph2
coVllAwIreVnYpawA	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+A]cl.intr2
coVllAwIreVnYpawAvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+Avawu]cl.min
coVllAwIreVnYpawe	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+e]cl.emph1
coVllAwIreVnYpawo	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+o]cl.intr1
coVllAwIreVnYpawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2
coVllAwIreVnYpawukUta	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+kUta]cl.incl2
coVllAwIreVnYpawum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+um]cl.incl1
coVllAwIreVnYpawumattum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+mattum]cl.rest
coVllAwIreVnYpawuwAnY	coVl]rt+Aw]proh+Ir]2shl/p+eVnYpawu]pl2+wAnY]cl.emph2
coVllAwIreVnYrYa	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYa]pl2
coVllAwIreVnYrYA	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYu]pl2+A]cl.intr2
coVllAwIreVnYrYAl	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYAl]pl2
coVllAwIreVnYrYAlA	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYAl]pl2+A]cl.intr2
coVllAwIreVnYrYAlAvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYAl]pl2+Avawu]cl.min
coVllAwIreVnYrYAle	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYAl]pl2+e]cl.emph1
coVllAwIreVnYrYAlo	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYAl]pl2+o]cl.intr1
coVllAwIreVnYrYAlum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYAl]pl2+um]cl.incl1
coVllAwIreVnYrYavA	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYa]pl2+A]cl.intr2
coVllAwIreVnYrYavAvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYa]pl2+Avawu]cl.min
coVllAwIreVnYrYAvawu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYu]pl2+Avawu]cl.min
coVllAwIreVnYrYave	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYa]pl2+e]cl.emph1
coVllAwIreVnYrYavo	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYa]pl2+o]cl.intr1
coVUAwIreVnYrYavum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYa]pl2+um]cl.incl1
coVllAwIreVnYrYe	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYu]pl2+e]cl.emph1
coVllAwIreVnYrYo	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYu]pl2+o]cl.intr1
coVllAwIreVnYrYu	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYu]pl2
coVllAwIreVnYrYum	coVl]rt+Aw]proh+Ir]2shl/p+eVnYrYu]pl2+um]cl.incl1

coVllAwIrkalY	coVl]rt+Aw]proh+IrkalY]2p/h
coVllAwIrkalYeVnYa	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2
coVllAwIrkalYeVnYakUta	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+kUta]cl.incl2
coVllAwIrkalYeVnYamattum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+mattum]cl.rest
coVllAwIrkalYeVnYappatuvawA	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVllAwIrkalYeVnYappatuvawAvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVllAwIrkalYeVnYappatuvawe	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVllAwIrkalYeVnYappatuvawo	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVllAwIrkalYeVnYappatuvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2
coVllAwIrkalYeVnYappatuvawukUta	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllAwIrkalYeVnYappatuvawum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVllAwIrkalYeVnYappatuvawumattum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVllAwIrkalYeVnYappatuvawuwAnY	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllAwIrkalYeVnYavA	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+A]cl.intr2
coVllAwIrkalYeVnYavAvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+Avawu]cl.min
coVllAwIrkalYeVnYave	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+e]cl.emph1
coVllAwIrkalYeVnYavo	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+o]cl.intr1
coVllAwIrkalYeVnYavum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+um]cl.incl1
coVllAwIrkalYeVnYawAnY	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYa]pl2+wAnY]cl.emph2
coVllAwIrkalYeVnYpawA	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+A]cl.intr2
coVllAwIrkalYeVnYpawAvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+Avawu]cl.min
coVllAwIrkalYeVnYpawe	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+e]cl.emph1
coVllAwIrkalYeVnYpawo	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+o]cl.intr1
coVllAwIrkalYeVnYpawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2
coVllAwIrkalYeVnYpawukUta	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+kUta]cl.incl2
coVllAwIrkalYeVnYpawum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+um]cl.incl1
coVllAwIrkalYeVnYpawumattum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+mattum]cl.rest
coVllAwIrkalYeVnYpawuwAnY	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVllAwIrkalYeVnYrYa	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYa]pl2
coVllAwIrkalYeVnYrYA	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYu]pl2+A]cl.intr2
coVllAwIrkalYeVnYrYAl	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYAl]pl2
coVllAwIrkalYeVnYrYAlA	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYAl]pl2+A]cl.intr2
coVllAwIrkalYeVnYrYAlAvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYAl]pl2+Avawu]cl.min
coVllAwIrkalYeVnYrYAle	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYAl]pl2+e]cl.emph1
coVllAwIrkalYeVnYrYAlo	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYAl]pl2+o]cl.intr1
coVllAwIrkalYeVnYrYAlum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYAl]pl2+um]cl.incl1
coVllAwIrkalYeVnYrYavA	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYa]pl2+A]cl.intr2
coVllAwIrkalYeVnYrYavAvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYa]pl2+Avawu]cl.min
coVllAwIrkalYeVnYrYAvawu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYu]pl2+Avawu]cl.min
coVllAwIrkalYeVnYrYave	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYa]pl2+e]cl.emph1
coVllAwIrkalYeVnYrYavo	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYa]pl2+o]cl.intr1
coVllAwIrkalYeVnYrYavum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYa]pl2+um]cl.incl1
coVllAwIrkalYeVnYrYe	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYu]pl2+e]cl.emph1
coVllAwIrkalYeVnYrYo	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYu]pl2+o]cl.intr1
coVllAwIrkalYeVnYrYu	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYu]pl2
coVllAwIrkalYeVnYrYum	coVl]rt+Aw]proh+IrkalY]2p/h+eVnYrYu]pl2+um]cl.incl1
coVleVnYa	coVl]rt+eVnYa]pl2
coVleVnYappatuvawA	coVl]rt+eVnYappatuvawu]pl2+A]cl.intr2
coVleVnYappatuvawAvawu	coVl]rt+eVnYappatuvawu]pl2+Avawu]cl.min
coVleVnYappatuvawe	coVl]rt+eVnYappatuvawu]pl2+e]cl.emph1
coVleVnYappatuvawo	coVl]rt+eVnYappatuvawu]pl2+o]cl.intr1
coVleVnYappatuvawu	coVl]rt+eVnYappatuvawu]pl2
coVleVnYappatuvawukUta	coVl]rt+eVnYappatuvawu]pl2+kUta]cl.incl2
coVleVnYappatuvawum	coVl]rt+eVnYappatuvawu]pl2+um]cl.incl1
coVleVnYappatuvawumattum	coVl]rt+eVnYappatuvawu]pl2+mattum]cl.rest
coVleVnYappatuvawuwAnY	coVl]rt+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVleVnYavA	coVl]rt+eVnYa]pl2+A]cl.intr2
coVleVnYavAvawu	coVl]rt+eVnYa]pl2+Avawu]cl.min
coVleVnYave	coVl]rt+eVnYa]pl2+e]cl.emph1
coVleVnYavo	coVl]rt+eVnYa]pl2+o]cl.intr1
coVleVnYavum	coVl]rt+eVnYa]pl2+um]cl.incl1
coVleVnYpawA	coVl]rt+eVnYpawu]pl2+A]cl.intr2
coVleVnYpawAvawu	coVl]rt+eVnYpawu]pl2+Avawu]cl.min
coVleVnYpawe	coVl]rt+eVnYpawu]pl2+e]cl.emph1
coVleVnYpawo	coVl]rt+eVnYpawu]pl2+o]cl.intr1
coVleVnYpawu	coVl]rt+eVnYpawu]pl2
coVleVnYpawukUta	coVl]rt+eVnYpawu]pl2+kUta]cl.incl2
coVleVnYpawum	coVl]rt+eVnYpawu]pl2+um]cl.incl1

coVleVnYpawumattum	coVl]rt+eVnYpawu]pl2+mattum]cl.rest
coVleVnYpawuwAnY	coVl]rt+eVnYpawu]pl2+wAnY]cl.emph2
coVleVnYrYa	coVl]rt+eVnYrYa]pl2
coVleVnYrYA	coVl]rt+eVnYrYu]pl2+A]cl.intr2
coVleVnYrYAl	coVl]rt+eVnYrYAl]pl2
coVleVnYrYAlA	coVl]rt+eVnYrYAl]pl2+A]cl.intr2
coVleVnYrYAlAvawu	coVl]rt+eVnYrYAl]pl2+Avawu]cl.min
coVleVnYrYAle	coVl]rt+eVnYrYAl]pl2+e]cl.emph1
coVleVnYrYAlo	coVl]rt+eVnYrYAl]pl2+o]cl.intr1
coVleVnYrYAlum	coVl]rt+eVnYrYAl]pl2+um]cl.incl1
coVlcVnYrYavA	coVl]rt+eVnYrYa]pl2+A]cl.intr2
coVleVnYrYavAvawu	coVl]rt+eVnYrYa]pl2+Avawu]cl.min
coVleVnYrYAvawu	coVl]rt+eVnYrYu]pl2+Avawu]cl.min
coVleVnYrYave	coVl]rt+eVnYrYa]pl2+e]cl.emph1
coVleVnYrYavo	coVl]rt+eVnYrYa]pl2+o]cl.intr1
coVleVnYrYavum	coVl]rt+eVnYrYa]pl2+um]cl.incl1
coVleVnYrYe	coVl]rt+eVnYrYu]pl2+e]cl.emph1
coVleVnYrYo	coVl]rt+eVnYrYu]pl2+o]cl.intr1
coVleVnYrYu	coVl]rt+eVnYrYu]pl2
coVleVnYrYum	coVl]rt+eVnYrYu]pl2+um]cl.incl1
coVlli	coVl]rt+i]posvbppl
coVlikilYYi	coVl]rt+i]posvbppl+kilYYi]aux
coVlikoVlY	coVl]rt+i]posvbppl+koVlY]aux
coVlikoVNtirukkirY*	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*
coVlikoVNtirukkirY*A	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+A]cl.intr2
coVlikoVNtirukkirY*ammA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+ammA]voc.f
coVlikoVNtirukkirY*appA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+appA]voc.m
coVlikoVNtirukkirY*atA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+atA]voc.m
coVlikoVNtirukkirY*atI	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+atI]voc.f
coVlikoVNtirukkirY*ayyA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+ayyA]voc.mh
coVlikoVNtirukkirY*e	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+e]cl.emph1
coVlikoVNtirukkirY*eVnYa	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2
coVlikoVNtirukkirY*eVnYakUta	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+kUta]cl.incl2
coVlikoVNtirukkirY*eVnYamattum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+mattum]cl.rest
coVlikoVNtirukkirY*eVnYappatuvawA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+A]cl.intr2
coVlikoVNtirukkirY*eVnYappatuvawAvawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+Avawu]cl.mir
coVlikoVNtirukkirY*eVnYappatuvawe	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+e]cl.emph1
coVlikoVNtirukkirY*eVnYappatuvawo	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+o]cl.intr1
coVlikoVNtirukkirY*eVnYappatuvawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2
coVlikoVNtirukkirY*eVnYappatuvawukUta	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlikoVNtirukkirY*eVnYappatuvawum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+um]cl.incl1
coVlikoVNtirukkirY*eVnYappatuvawumattum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+mattum]cl.res
coVlikoVNtirukkirY*eVnYappatuvawuwAnY	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYappatuvawu]pl2+wAnY]cl.emp
coVlikoVNtirukkirY*eVnYavA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+A]cl.intr2
coVlikoVNtirukkirY*eVnYavAvawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+Avawu]cl.min
coVlikoVNtirukkirY*eVnYave	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+e]cl.emph1
coVlikoVNtirukkirY*eVnYavo	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+o]cl.intr1
coVlikoVNtirukkirY*eVnYavum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+um]cl.incl1
coVlikoVNtirukkirY*eVnYawAnY	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYa]pl2+wAnY]cl.emph2
coVlikoVNtirukkirY*eVnYpawA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+A]cl.intr2
coVlikoVNtirukkirY*eVnYpawAvawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+Avawu]cl.min
coVlikoVNtirukkirY*eVnYpawe	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+e]cl.emph1
coVlikoVNtirukkirY*eVnYpawo	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+o]cl.intr1
coVlikoVNtirukkirY*eVnYpawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2
coVlikoVNtirukkirY*eVnYpawukUta	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+kUta]cl.incl2
coVlikoVNtirukkirY*eVnYpawum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+um]cl.incl1
coVlikoVNtirukkirY*eVnYpawumattum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+mattum]cl.rest
coVlikoVNtirukkirY*eVnYpawuwAnY	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYpawu]pl2+wAnY]cl.emph2
coVlikoVNtirukkirY*eVnYrYa	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYa]pl2
coVlikoVNtirukkirY*eVnYrYA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYu]pl2+A]cl.intr2
coVlikoVNtirukkirY*eVnYrYAl	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYAl]pl2
coVlikoVNtirukkirY*eVnYrYAlA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYAl]pl2+A]cl.intr2
coVlikoVNtirukkirY*eVnYrYAlAvawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYAl]pl2+Avawu]cl.min
coVlikoVNtirukkirY*eVnYrYAle	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYAl]pl2+e]cl.emph1
coVlikoVNtirukkirY*eVnYrYAlo	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYAl]pl2+o]cl.intr1
coVlikoVNtirukkirY*eVnYrYAlum	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYAl]pl2+um]cl.incl1
coVlikoVNtirukkirY*eVnYrYavA	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYa]pl2+A]cl.intr2
coVlikoVNtirukkirY*eVnYrYavAvawu	coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYa]pl2+Avawu]cl.min

coVllikoVNtirukkirY*eVnYrYAvawu
coVllikoVNtirukkirY*eVnYrYave
coVllikoVNtirukkirY*eVnYrYavo
coVllikoVNtirukkirY*eVnYrYavum
coVllikoVNtirukkirY*eVnYrYe
coVllikoVNtirukkirY*eVnYrYo
coVllikoVNtirukkirY*eVnYrYu
coVllikoVNtirukkirY*eVnYrYum
coVllikoVNtirukkirY*o
coVllikoVNtirukkirY*pAr
coVllikoVNtirukkirY*powA
coVllikoVNtirukkirY*powAvawu
coVllikoVNtirukkirY*powe
coVllikoVNtirukkirY*powo
coVllikoVNtirukkirY*powu
coVllikoVNtirukkirY*powukUta
coVllikoVNtirukkirY*powukUta
coVllikoVNtirukkirY*powum
coVllikoVNtirukkirY*powumattum
coVllikoVNtirukkirY*powuwAnY
coVllikoVNtirunw*
coVllikoVNtirunw*A
coVllikoVNtirunw*ammA
coVllikoVNtirunw*appA
coVllikoVNtirunw*atA
coVllikoVNtirunw*atI
coVllikoVNtirunw*ayyA
coVllikoVNtirunw*e
coVllikoVNtirunw*eVnYa
coVllikoVNtirunw*eVnYakUta
coVllikoVNtirunw*eVnYamattum
coVllikoVNtirunw*eVnYappatuvawA
coVllikoVNtirunw*eVnYappatuvawAvawu
coVllikoVNtirunw*eVnYappatuvawe
coVllikoVNtirunw*eVnYappatuvawo
coVllikoVNtirunw*eVnYappatuvawu
coVllikoVNtirunw*eVnYappatuvawukUta
coVllikoVNtirunw*eVnYappatuvawum
coVllikoVNtirunw*eVnYappatuvawumattum
coVllikoVNtirunw*eVnYappatuvawuwAnY
coVllikoVNtirunw*eVnYavA
coVllikoVNtirunw*eVnYavAvawu
coVllikoVNtirunw*eVnYave
coVllikoVNtirunw*eVnYavo
coVllikoVNtirunw*eVnYavum
coVllikoVNtirunw*eVnYawAnY
coVllikoVNtirunw*eVnYpawA
coVllikoVNtirunw*eVnYpawAvawu
coVllikoVNtirunw*eVnYpawe
coVllikoVNtirunw*eVnYpawo
coVllikoVNtirunw*eVnYpawu
coVllikoVNtirunw*eVnYpawukUta
coVllikoVNtirunw*eVnYpawum
coVllikoVNtirunw*eVnYpawumattum
coVllikoVNtirunw*eVnYpawuwAnY
coVllikoVNtirunw*eVnYrYa
coVllikoVNtirunw*eVnYrYA
coVllikoVNtirunw*eVnYrYAl
coVllikoVNtirunw*eVnYrYAlA
coVllikoVNtirunw*eVnYrYAlAvawu
coVllikoVNtirunw*eVnYrYAle
coVllikoVNtirunw*eVnYrYAlo
coVllikoVNtirunw*eVnYrYAlum
coVllikoVNtirunw*eVnYrYavA
*coVllikoVNtirunw*eVnYrYavAvawu*
coVllikoVNtirunw*eVnYrYAvawu

coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrY{a]pl2+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYa]pl2+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYa]pl2+um]cl.incl1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYu]pl2+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYu]pl2+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYu]pl2
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+eVnYrYu]pl2+um]cl.incl1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+pAr]aux
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+kUta]cl.incl2
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+kUta]cl.incl2
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+um]cl.incl1
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+mattum]cl.rest
coVl]rt+i]posvbppl+koVNtirukkirY]npstdurcdl*+powu]adv+wAnY]cl.emph2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+ammA]voc.f
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+appA]voc.m
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+atA]voc.m
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+atI]voc.f
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+ayyA]voc.mh
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+kUta]cl.incl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+mattum]cl.rest
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+um]cl.incl1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+um]cl.incl1
TOVI]rt+i]pc>svbppl+koVNlirunw]p,tdutcdl»+eVnYpawu]pl2+mttuin]d.rest
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYa]pl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYu]pl2+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYAl]pl2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl+eVnYrYAl]pl2+um]cl.incl1*
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl+eVnYrYa]pl2+A]cl.intr2*
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYu]pl2+Avawu]cl.min

coVlikoVNtirunw*eVnYrYave	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYa]pl2+e]cl.emph1
coVlikoVNtirunw*eVnYrYavo	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYa]pl2+o]cl.intr1
coVlikoVNtirunw*eVnYrYavum	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYa]pl2+um]cl.incl1
coVlikoVNtirunw*eVnYrYe	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYu]pl2+e]cl.emph1
coVlikoVNtirunw*eVnYrYo	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYu]pl2+o]cl.intr1
coVlikoVNtirunw*eVnYrYu	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYu]pl2
coVlikoVNtirunw*eVnYrYum	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+eVnYrYu]pl2+um]cl.incl1
coVlikoVNtirunw*o	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+o]cl.intr1
coVlikoVNtirunw*pAr	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+pAr]aux
coVlikoVNtirunw*powA	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+A]cl.intr2
coVlikoVNtirunw*powAvawu	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+Avawu]cl.min
coVlikoVNtirunw*powe	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+e]cl.emph1
coVlikoVNtirunw*powo	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+o]cl.intr1
coVlikoVNtirunw*powu	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv
coVlikoVNtirunw*powukUta	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+kUta]cl.incl2 -
coVlikoVNtirunw*powukUta	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+kUta]cl.incl2
coVlikoVNtirunw*powum	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+um]cl.incl1
coVlikoVNtirunw*powumattum	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+mattum]cl.rest
coVlikoVNtirunw*powuwAnY	coVl]rt+i]posvbppl+koVNtirunw]pstdurcdl*+powu]adv+wAnY]cl.emph2
coVlikoVtu	coVl]rt+i]posvbppl+koVtu]aux
coVlimuti	coVl]rt+i]posvbppl+muti]aux
coVlimutiyAwu	coVl]rt+i]posvbppl+mutiyAwu]aux
coVlimutiyAwA	coVl]rt+i]posvbppl+mutiyAwu]aux+A]cl.intr2
coVlimutiyAwo	coVl]rt+i]posvbppl+mutiyAwu]aux+o]cl.intr1
coVlimutiyAwe	coVl]rt+i]posvbppl+mutiyAwu]aux+e]cl.emph1
coVlimutiyum	coVl]rt+i]posvbppl+mutiyum]aux
coVlimutiyumA	coVl]rt+i]posvbppl+mutiyum]aux+A]cl.intr2
coVlimutiyumo	coVl]rt+i]posvbppl+mutiyum]aux+o]cl.intr1
coVlimutiyume	coVl]rt+i]posvbppl+mutiyum]aux+e]cl.emph1
coVlipAr	coVl]rt+i]posvbppl+pAr]aux
coVlivittA	coVl]rt+i]posvbppl+vittu]aux+A]cl.intr2
coVlivittAl	coVl]rt+i]posvbppl+vittAl]poscdl
coVlivittAleVnYpawA	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+A]cl.intr2
coVlivittAleVnYpawAvawu	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+Avawu]cl.min
coVlivittAleVnYpawe	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+e]cl.emph1
coVlivittAleVnYpawo	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+o]cl.intr1
coVlivittAleVnYpawu	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2
coVlivittAleVnYpawukUta	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+kUta]cl.incl2
coVlivittAleVnYpawum	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+um]cl.incl1
coVlivittAleVnYpawumattum	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+mattum]cl.rest
coVlivittAleVnYpawuwAnY	coVl]rt+i]posvbppl+vittAl]poscdl+eVnYpawu]pl2+wAnY]cl.emph2
coVlivittAlmutiyAwu	coVl]rt+i]posvbppl+vittAl]poscdl+mutiyAwu]aux
coVlivittAlmutiyum	coVl]rt+i]posvbppl+vittAl]poscdl+mutiyum]aux
coVlivittAlpAr	coVl]rt+i]posvbppl+vittAl]poscdl+pAr]aux
coVlivittAlpo	coVl]rt+i]posvbppl+vittAl]poscdl+po]aux
coVlivittAvawu	coVl]rt+i]posvbppl+vittu]aux+Avawu]cl.min
coVlivitte	coVl]rt+i]posvbppl+vittu]aux+e]cl.emph1
coVlivitto	coVl]rt+i]posvbppl+vittu]aux+o]cl.intr1
coVlivittu	coVl]rt+i]posvbppl+vittu]aux
coVlivittum	coVl]rt+i]posvbppl+vittu]aux+um]cl.incl1
coVlivittuwAnY	coVl]rt+i]posvbppl+vittu]aux+wAnY]cl.emph2
coVlivitu	coVl]rt+i]posvbppl+vitu]aux
coVliwalYlYu	coVl]rt+i]posvbppl+walYlYu]aux
coVliwIr	coVl]rt+i]posvbppl+wIr]aux
coVliwoVlE	coVl]rt+i]posvbppl+woVlE]aux
coVliyA	coVl]rt+i]posvbppl+A]cl.intr2
coVliyAyirYrYA	coVl]rt+i]posvbppl+AyirYrYu]aux+A]cl.intr2
coVliyAyirYrYe	coVl]rt+i]posvbppl+AyirYrYu]aux+e]cl.emph1
coVliyAyirYrYo	coVl]rt+i]posvbppl+AyirYrYu]aux+o]d.intr1
coVliyAyirYrYu	coVl]rt+i]posvbppl+AyirYrYu]aux
coVliyAyirYrYum	coVl]rt+i]posvbppl+AyirYrYu]aux+um]cl.incl1
coVliye	coVl]rt+i]posvbppl+e]cl.emph1
coVliyo	coVl]rt+i]posvbppl+o]cl.intr1
coVllfkalY	coVl]rt+]imp+ufkalY]2s,h/p
coVllufkalYeVnYa	coVl]rt+ufkalY]2s,h/p+eVnYa]pl2
coVllufkalYeVnYakUta	coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+kUta]cl.incl2
coVllufkalYeVnYamattum	coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+mattum]cl.rest
coVllufkalYeVnYappatuvawA	coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+A]cl.intr2

coVUufkaiYeVnYappatuvawAvawu
coVllufkalYeVnYappatuvawe
coVUufkalYcVnYappatuvawo
coVllufkalYeVnYappatuvawu
coVllufkalYeVnYappatuvawukUta
coVllufkalYcVnYappatuvawum
coVllufkalYeVnYappatuvawumattum
coVllufkalYeVnYappatuvawuwAnY
coVUufkalYcVnYavA
coVllufkalYeVnYavAvawu
coVllufkalYeVnYave
coVllufkalYeVnYavo
coVllufkalYeVnYavum
coVllufkalYeVnYawAnY
coVllufkalYeVnYpawA
coVllufkalYeVnYpawAvawu
coVUufkalYcVnYpawc
coVllufkalYeVnYpawo
coVllufkalYeVnYpawu
coVllufkalYeVnYpawukUta
coVllufkalYeVnYpawum
coVllufkalYeVnYpawumattum
coVllufkalYeVnYpawuwAnY
coVllufkalYeVnYrYa
coVllufkalYeVnYrY A
coVllufkalYeVnYrYAl
coVllufkalYeVnYrYAlA
coVllufkalYeVnYrYAlAvawu
coVllufkalYeVnYrYAle
coVUufkalYcVnYrYAlo
coVllufkalYeVnYrYAlum
coVllufkalYeVnYrYavA
coVllufkalYeVnYrYavAvawu
coVllufkalYeVnYrYAvawu
coVllufkalYeVnYrYave
coVllufkalYeVnYrYavo
coVllufkalYeVnYrYavum
coVUufkalYcVnYrYc
coVllufkalYeVnYrYo
coVllufkalYeVnYrYu
coVllufkalYeVnYrYum
coVllum
coVllumA
coVllumalYavA
coVllumalYavAvawu
coVllumalYave
coVUumalYavo
coVllumalYavu
coVllumalYavukUta
coVllumalYavukUta
coVUumalYavum
coVllumalYavumattum
coVllumalYavuwAnY
coVllumammA
coVllumAnYAl
coVllumappA
coVUumatA
coVllumatI
coVllumayyA
coVllume
coVllumeVnYa
coVllumeVnYakUta
coVllumeVnYamattum
coVllumeVnYappatuvawA
coVllumeVnYappatuvawAvawu
coVllumeVnYappatuvawe
coVllumeVnYappatuvawo
coVllumeVnYappatuvawu

coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+ufkalY]2s,h/p+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+A]cl.intr2
coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+Avawu]cl.min
coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+e]cl.emph1
coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+o]cl.intr1
coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+um]cl.incl1
coVl]rt+ufkalY]2s,h/p+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+A]cl.intr2
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+Avawu]cl.min
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+e]cl.emph1
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+o]cl.intr1
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+kUta]cl.incl2
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+um]cl.incl1
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+mattum]cl.rest
coVl]rt+ufkalY]2s,h/p+eVnYapawu]pl2+wAnY]cl.emph2
coVl]rt+ufkalY]2s,h/p+eVnYrYa]pl2
coVl]rt+ufkalY]2s,h/p+eVnYrYu]pl2+A]cl.intr2
coVl]rt+ufkalY]2s,h/p+eVnYrYAl]pl2
coVl]rt+ufkalY]2s,h/p+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+ufkalY]2s,h/p+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+ufkalY]2s,h/p+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+ufkalY]2s,h/p+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+ufkalY]2s,h/p+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+ufkalY]2s,h/p+eVnYrYa]pl2+A]cl.intr2
coVl]rt+ufkalY]2s,h/p+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+ufkalY]2s,h/p+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+ufkalY]2s,h/p+eVnYrYa]pl2+e]cl.emph1
coVl]rt+ufkalY]2s,h/p+eVnYrYa]pl2+o]cl.intr1
coVl]rt+ufkalY]2s,h/p+eVnYrYa]pl2+um]cl.incl1
coVl]rt+ufkalY]2s,h/p+eVnYrYu]pl2+e]cl.emph1
coVl]rt+ufkalY]2s,h/p+eVnYrYu]pl2+o]cl.intr1
coVl]rt+ufkalY]2s,h/p+eVnYrYu]pl2
coVl]rt+ufkalY]2s,h/p+eVnYrYu]pl2+um]cl.incl1
coVl]rt+um]hab
coVl]rt+um]hab+A]cl.intr2
coVl]rt+um]hab+alYavu]adv+A]cl.intr2
coVl]rt+um]hab+alYavu]adv+Avawu]cl.min
coVl]rt+um]hab+alYavu]adv+e]cl.emph1
coVl]rt+um]hab+alYavu]adv+o]cl.intr1
coVl]rt+um]hab+alYavu]adv
coVl]rt+um]hab+alYavu]adv+kUta]cl.incl2
coVl]rt+um]hab+alYavu]adv+kUta]cl.incl2
coVl]rt+um]hab+alYavu]adv+um]cl.incl1
coVl]rt+um]hab+alYavu]adv+mattum]cl.rest
coVl]rt+um]hab+alYavu]adv+wAnY]cl.emph2
coVl]rt+um]hab+ammA]voc.f
coVl]rt+um]hab+AnYAl]adm
coVl]rt+um]hab+appA]voc.m
coVl]rt+um]hab+atA]voc.m
coVl]rt+um]hab+atI]voc.f
coVl]rt+um]hab+ayyA]voc.mh
coVl]rt+um]hab+e]cl.emph1
coVl]rt+um]hab+eVnYa]pl2
coVl]rt+um]hab+eVnYa]pl2+kUta]cl.incl2
coVl]rt+um]hab+eVnYa]pl2+mattum]cl.rest
coVl]rt+um]hab+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+um]hab+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+um]hab+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+um]hab+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+um]hab+eVnYappatuvawu]pl2

coVllumeVnYappatuvawukUta	coVl]rt+um]hab+eVnYappatuvawu]pl2+kUta]cl.incl2
coVllumeVnYappatuvawum	coVl]rt+um]hab+eVnYappatuvawu]pl2+um]cl.incl1
coVllumeVnYappatuvawumattum	coVl]rt+um]hab+eVnYappatuvawu]pl2+mattum]cl.rest
coVllumeVnYappatuvawuwAnY	coVl]rt+um]hab+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVllumeVnYavA	coVl]rt+um]hab+eVnYa]pl2+A]cl.intr2
coVllumeVnYavAvawu	coVl]rt+um]hab+eVnYa]pl2+Avawu]cl.min
coVllumeVnYave	coVl]rt+um]hab+eVnYa]pl2+e]cl.emph1
coVllumeVnYavo	coVl]rt+um]hab+eVnYa]pl2+o]cl.intr1
coVllumeVnYavum	coVl]rt+um]hab+eVnYa]pl2+um]cl.incl1
coVllumeVnYawAnY	coVl]rt+um]hab+eVnYa]pl2+wAnY]cl.emph2
coVllumeVnYpawA	coVl]rt+um]hab+eVnYpawu]pl2+A]cl.intr2
coVllumeVnYpawAvawu	coVl]rt+um]hab+eVnYpawu]pl2+Avawu]cl.min
coVllumeVnYpawe	coVl]rt+um]hab+eVnYpawu]pl2+e]cl.emph1
coVllumeVnYpawo	coVl]rt+um]hab+eVnYpawu]pl2+o]cl.intr1
coVllumeVnYpawu	coVl]rt+um]hab+eVnYpawu]pl2
coVllumeVnYpawukUto	coVl]rt+um]hab+eVnYpawu]pl2+kUta]cl.incl2
coVllumeVnYpawum	coVl]rt+um]hab+eVnYpawu]pl2+um]cl.incl1
coVllumeVnYpawumattum	coVl]rt+um]hab+eVnYpawu]pl2+mattum]cl.rest
coVllumeVnYpawuwAnY	coVl]rt+um]hab+eVnYpawu]pl2+wAnY]cl.emph2
coVllumeVnYrYa	coVl]rt+um]hab+eVnYrYa]pl2
coVllumeVnYrYA	coVl]rt+um]hab+eVnYrYu]pl2+A]cl.intr2
coVllumeVnYrYAl	coVl]rt+um]hab+eVnYrYAl]pl2
coVllumeVnYrYAlA	coVl]rt+um]hab+eVnYrYAl]pl2+A]cl.intr2
coVllumeVnYrYAlAvawu	coVl]rt+um]hab+eVnYrYAl]pl2+Avawu]cl.min
coVllumeVnYrYAle	coVl]rt+um]hab+eVnYrYAl]pl2+e]cl.emph1
coVllumeVnYrYAlo	coVl]rt+um]hab+eVnYrYAl]pl2+o]cl.intr1
coVllumeVnYrYAlum	coVl]rt+um]hab+eVnYrYAl]pl2+um]cl.incl1
coVllumeVnYrYavA	coVl]rt+um]hab+eVnYrYa]pl2+A]cl.intr2
coVllumeVnYrYavAvawu	coVl]rt+um]hab+eVnYrYa]pl2+Avawu]cl.min
coVllumeVnYrYAvawu	coVl]rt+um]hab+eVnYrYu]pl2+Avawu]cl.min
coVllumeVnYrYave	coVl]rt+um]hab+eVnYrYa]pl2+e]cl.emph1
coVllumeVnYrYavo	coVl]rt+um]hab+eVnYrYa]pl2+o]cl.intr1
coVllumeVnYrYavum	coVl]rt+um]hab+eVnYrYa]pl2+um]cl.incl1
coVllumeVnYrYe	coVl]rt+um]hab+eVnYrYu]pl2+e]cl.emph1
coVllumeVnYrYo	coVl]rt+um]hab+eVnYrYu]pl2+o]cl.intr1
coVllumeVnYrYu	coVl]rt+um]hab+eVnYrYu]pl2
coVllumeVnYrYum	coVl]rt+um]hab+eVnYrYu]pl2+um]cl.incl1
coVllumiru	coVl]rt+um]hab+iru]aux
coVllumo	coVl]rt+um]hab+o]cl.intr1
coVllumpAr	coVl]rt+um]hab+pAr]aux
coVllumpowA	coVl]rt+um]hab+powu]adv+A]cl.intr2
coVllumpowAvawu	coVl]rt+um]hab+powu]adv+Avawu]cl.min
coVllumpowe	coVl]rt+um]hab+powu]adv+e]cl.emph1
coVllumpowo	coVl]rt+um]hab+powu]adv+o]cl.intr1
coVllumpowu	coVl]rt+um]hab+powu]adv
coVllumpowukUta	coVl]rt+um]hab+powu]adv+kUta]cl.incl2
coVllumpowukUto	coVl]rt+um]hab+powu]adv+kUta]cl.incl2
coVllumpowum	coVl]rt+um]hab+powu]adv+um]cl.incl1
coVllumpowumattum	coVl]rt+um]hab+powu]adv+mattum]cl.rest
coVllumpowuwAnY	coVl]rt+um]hab+powu]adv+wAnY]cl.emph2
coVllumvarE	coVl]rt+um]hab+varE]adv
coVllumvarEyA	coVl]rt+um]hab+varE]adv+A]cl.intr2
coVllumvarEyAvawu	coVl]rt+um]hab+varE]adv+Avawu]cl.min
coVllumvarEe	coVl]rt+um]hab+varE]adv+e]cl.emph1
coVllumvarEkUta	coVl]rt+um]hab+varE]adv+kUta]cl.incl2
coVllumvarEkUta	coVl]rt+um]hab+varE]adv+kUta]cl.incl2
coVllumvarEmattum	coVl]rt+um]hab+varE]adv+mattum]cl.rest
coVllumvarEyo	coVl]rt+um]hab+varE]adv+o]cl.intr1
coVllumvarEyum	coVl]rt+um]hab+varE]adv+um]cl.incl1
coVllumvarEwAnY	coVl]rt+um]hab+varE]adv+wAnY]cl.emph2
coVllumvarEyA	coVl]rt+um]hab+varE]adv+A]cl.intr2
coVllumvarEyAvawu	coVl]rt+um]hab+varE]adv+Avawu]cl.min
coVllumvarEyum	coVl]rt+um]hab+varE]adv+um]cl.incl1
coVlvA	coVl]rt+vA]aux
coVlvAlY	coVl]rt+v]fut+AlY]3sf
coVlvAlYA	coVl]rt+v]fut+AlY]3sf+A]cl.intr2
coVlvAlYammA	coVl]rt+v]fut+AlY]3sf+ammA]voc.f
coVlvAlYAnYAl	coVl]rt+v]fut+AlY]3sf+AnYAl]adm

coVlvAlYAnYAlpAr
coVlvAlYappA
coVlvAlYatA
coVlvAlYatf
coVlvAlYayyA
coVlvAlYe
coVlvAlYeVnYa
coVlvAlYeVnYakUta
coVlvAlYeVnYamattum
coVlvAlYeVnYappatuvawA
coVlvAlYeVnYappatuvawAvawu
coVlvAlYeVnYappatuvawe
coVlvAlYeVnYappatuvawo
coVlvAlYeVnYappatuvawu
coVlvAlYeVnYappatuvawukUta
coVlvAlYeVnYappatuvawum
coVlvAlYeVnYappatuvawumattum
coVlvAlYeVnYappatuvawuwAnY
coVlvAlYeVnYavA
coVlvAlYeVnYavAvawu
coVlvAlYeVnYave
coVlvAlYeVnYavo
coVlvAlYeVnYavum
coVlvAlYeVnYawAnY
coVlvAlYeVnYpawA
coVlvAlYeVnYpawAvawu
coVlvAlYeVnYpawe
coVlvAlYeVnYpawo
coVlvAlYeVnYpawu
coVlvAlYeVnYpawukUta
coVlvAlYeVnYpawum
coVlvAlYeVnYpawumattum
coVlvAlYeVnYpawuwAnY
coVlvAlYeVnYrYa
coVlvAlYeVnYrYA
coVlvAIYcVnYrYAl
coVlvAlYeVnYrYAlA
coVlvAlYeVnYrYAlAvawu
coVlvAlYeVnYrYAle
coVlvAlYeVnYrYAlo
coVlvAlYeVnYrYAlum
coVlvAlYeVnYrYavA
coVlvAlYeVnYrYavAvawu
coVlvAlYeVnYrYAvawu
coVlvAlYeVnYrYave
coVlvAlYeVnYrYavo
coVlvAlYeVnYrYavum
coVlvAlYeVnYrYe
coVlvAlYeVnYrYo
coVlvAlYeVnYrYu
coVlvAlYeVnYrYum
coVlvAlYo
coVlvAlYpAr
coVlvAnY
coVlvAnYA
coVlvAnYammA
coVlvAnYAnYAl
coVlvAnYAnYAlpAr
coVlvAnYappA
coVlvAnYatA
coVlvAnYatl
coVlvAnYayyA
coVlvAnYe
coVlvAnYeVnYa
coVlvAnYeVnYakUta
coVlvAnYeVnYamattum
coVlvAnYeVnYappatuvawA
coVlvAnYeVnYappatuvawAvawu
coVl]rt+v]fut+AlY]3sf+AnYAl]adm+pAr]aux
coVl]rt+v]fut+AlY]3sf+appA]voc.m
coVl]rt+v]fut+AlY]3sf+atA]voc.m
coVl]rt+v]fut+AlY]3sf+atl]voc.f
coVl]rt+v]fut+AlY]3sf+ayyA]voc.mh
coVl]rt+v]fut+AlY]3sf+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+kUta]cl.incl2
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+mattum]cl.rest
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+v]fut+AlY]3sf+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+A]cl.intr2
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+Avawu]cl.min
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+um]cl.incl1
coVl]rt+v]fut+AlY]3sf+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+A]cl.intr2
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+Avawu]cl.min
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+kUta]cl.incl2
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+um]cl.incl1
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+mattum]cl.rest
coVl]rt+v]fut+AlY]3sf+eVnYapawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut+AlY]3sf+eVnYrYa]pl2
coVl]rt+v]fut+AlY]3sf+eVnYrYu]pl2+A]cl.intr2
coVl]rt+v]fut+AlY]3sf+eVnYrYAl]pl2
coVl]rt+v]fut+AlY]3sf+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+v]fut+AlY]3sf+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+v]fut+AlY]3sf+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+v]fut+AlY]3sf+eVnYrYa]pl2+A]cl.intr2
coVl]rt+v]fut+AlY]3sf+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+v]fut+AlY]3sf+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+v]fut+AlY]3sf+eVnYrYa]pl2+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYrYa]pl2+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+eVnYrYa]pl2+um]cl.incl1
coVl]rt+v]fut+AlY]3sf+eVnYrYu]pl2+e]cl.emph1
coVl]rt+v]fut+AlY]3sf+eVnYrYu]pl2+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+eVnYrYu]pl2
coVl]rt+v]fut+AlY]3sf+eVnYrYu]pl2+um]cl.incl1
coVl]rt+v]fut+AlY]3sf+o]cl.intr1
coVl]rt+v]fut+AlY]3sf+pAr]aux
coVl]rt+v]fut+AnY
coVl]rt+v]fut+AnY]3sm+A]cl.intr2
coVl]rt+v]fut+AnY]3sm+ammA]voc.f
coVl]rt+v]fut+AnY]3sm+AnYAl]adm
coVl]rt+v]fut+AnY]3sm+AnYAl]adm+pAr]aux
coVl]rt+v]fut+AnY]3sm+appA]voc.m
coVl]rt+v]fut+AnY]3sm+atA]voc.m
coVl]rt+v]fut+AnY]3sm+atl]voc.f
coVl]rt+v]fut+AnY]3sm+ayyA]voc.mh
coVl]rt+v]fut+AnY]3sm+e]cl.emph1
coVl]rt+v]fut+AnY]3sm+eVnYa]pl2
coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+kUta]cl.incl2
coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+mattum]cl.rest
coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+Avawu]cl.min

coVlvAnYeVnYappatuvawe	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+e]cl.emph1
coVlvAnYeVnYappatuvawo	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+o]cl.intr1
coVlvAnYeVnYappatuvawu	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2
coVlvAnYeVnYappatuvawukUta	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlvAnYeVnYappatuvawum	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+um]cl.incl1
coVlvAnYeVnYappatuvawumattum	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+mattum]cl.rest
coVlvAnYeVnYappatuvawuwAnY	coVl]rt+v]fut+AnY]3sm+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlvAnYeVnYavA	coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+A]cl.intr2
coVlvAnYeVnYavAvawu	coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+Avawu]cl.min
coVlvAnYeVnYave	coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+e]cl.emph1
coVlvAnYeVnYavo	coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+o]cl.intr1
coVlvAnYeVnYavum	coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+um]cl.incl1
coVlvAnYeVnYawAnY	coVl]rt+v]fut+AnY]3sm+eVnYa]pl2+wAnY]cl.emph2
coVlvAnYeVnYpawA	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+A]cl.intr2
coVlvAnYeVnYpawAvawu	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+Avawu]cl.min
coVlvAnYeVnYpawe	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+e]cl.emph1
coVlvAnYeVnYpawo	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+o]cl.intr1
coVlvAnYeVnYpawu	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2
coVlvAnYeVnYpawukUta	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+kUta]cl.incl2
coVlvAnYeVnYpawum	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+um]cl.incl1
coVlvAnYeVnYpawumattum	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+mattum]cl.rest
coVlvAnYeVnYpawuwAnY	coVl]rt+v]fut+AnY]3sm+eVnYpawu]pl2+wAnY]cl.emph2
coVlvAnYeVnYrYa	coVl]rt+v]fut+AnY]3sm+eVnYrYa]pl2
coVlvAnYeVnYrYA	coVl]rt+v]fut+AnY]3sm+eVnYrYu]pl2+A]cl.intr2
coVlvAnYeVnYrYAl	coVl]rt+v]fut+AnY]3sm+eVnYrYAl]pl2
coVlvAnYeVnYrYAlA	coVl]rt+v]fut+AnY]3sm+eVnYrYAl]pl2+A]cl.intr2
coVlvAnYeVnYrYAlAvawu	coVl]rt+v]fut+AnY]3sm+eVnYrYAl]pl2+Avawu]cl.min
coVlvAnYeVnYrYAle	coVl]rt+v]fut+AnY]3sm+eVnYrYAl]pl2+e]cl.emph1
coVlvAnYeVnYrYAlo	coVl]rt+v]fut+AnY]3sm+eVnYrYAl]pl2+o]cl.intr1
coVlvAnYeVnYrYAlum	coVl]rt+v]fut+AnY]3sm+eVnYrYAl]pl2+um]cl.incl1
coVlvAnYeVnYrYavA	coVl]rt+v]fut+AnY]3sm+eVnYrYa]pl2+A]cl.intr2
coVlvAnYeVnYrYavAvawu	coVl]rt+v]fut+AnY]3sm+eVnYrYa]pl2+Avawu]cl.min
coVlvAnYeVnYrYAvawu	coVl]rt+v]fut+AnY]3sm+eVnYrYu]pl2+Avawu]cl.min
coVlvAnYeVnYrYave	coVl]rt+v]fut+AnY]3sm+eVnYrYa]pl2+e]cl.emph1
coVlvAnYeVnYrYavo	coVl]rt+v]fut+AnY]3sm+eVnYrYa]pl2+o]cl.intr1
coVlvAnYeVnYrYavum	coVl]rt+v]fut+AnY]3sm+eVnYrYa]pl2+um]cl.incl1
coVlvAnYeVnYrYe	coVl]rt+v]fut+AnY]3sm+eVnYrYu]pl2+e]cl.emph1
coVlvAnYeVnYrYo	coVl]rt+v]fut+AnY]3sm+eVnYrYu]pl2+o]cl.intr1
coVlvAnYeVnYrYu	coVl]rt+v]fut+AnY]3sm+eVnYrYu]pl2
coVlvAnYeVnYrYum	coVl]rt+v]fut+AnY]3sm+eVnYrYu]pl2+um]cl.incl1
coVlvAnYo	coVl]rt+v]fut+AnY]3sm+o]cl.intr1
coVlvAnYpAr	coVl]rt+v]fut+AnY]3sm+pAr]aux
coVlvAr	coVl]rt+v]fut+Ar]3sh
coVlvArA	coVl]rt+v]fut+Ar]3sh+A]cl.intr2
coVlvArammA	coVl]rt+v]fut+Ar]3sh+ammA]voc.f
coVlvArAnYAl	coVl]rt+v]fut+Ar]3sh+AnYAl]adm
coVlvArAnYAlpAr	coVl]rt+v]fut+Ar]3sh+AnYAl]adm+pAr]aux
coVlvArappA	coVl]rt+v]fut+Ar]3sh+appA]voc.m
coVlvAratA	coVl]rt+v]fut+Ar]3sh+atA]voc.m
coVlvAratI	coVl]rt+v]fut+Ar]3sh+atI]voc.f
coVlvArayyA	coVl]rt+v]fut+Ar]3sh+ayyA]voc.mh
coVlvAre	coVl]rt+v]fut+Ar]3sh+e]cl.emph1
coVlvAreVnYa	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2
coVlvAreVnYakUta	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+kUta]cl.incl2
coVlvAreVnYamattum	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+mattum]cl.rest
coVlvAreVnYappatuvawA	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+A]cl.intr2
coVlvAreVnYappatuvawAvawu	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+Avawu]cl.min
coVlvAreVnYappatuvawe	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+e]cl.emph1
coVlvAreVnYappatuvawo	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+o]cl.intr1
coVlvAreVnYappatuvawu	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2
coVlvAreVnYappatuvawukUta	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlvAreVnYappatuvawum	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+um]cl.incl1
coVlvAreVnYappatuvawumattum	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+mattum]cl.rest
coVlvAreVnYappatuvawuwAnY	coVl]rt+v]fut+Ar]3sh+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlvAreVnYavA	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+A]cl.intr2
coVlvAreVnYavAvawu	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+Avawu]cl.min
coVlvAreVnYave	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+e]cl.emph1
coVlvAreVnYavo	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+o]cl.intr1

coVlvAreVnYavum	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+um]cl.incl1
coVlvAreVnYawAnY	coVl]rt+v]fut+Ar]3sh+eVnYa]pl2+wAnY]cl.emph2
coVlvAreVnYpawA	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+A]cl.intr2
coVlvAreVnYpawAvawu	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+Avawu]cl.min
coVlvAreVnYpawe	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+e]cl.emph1
coVlvAreVnYpawo	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+o]cl.intr1
coVlvAreVnYpawu	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2
coVlvAreVnYpawukUta	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+kUta]cl.incl2
coVlvAreVnYpawum	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+um]cl.incl1
coVlvAreVnYpawumattum	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+mattum]cl.rest
coVlvAreVnYpawuwAnY	coVl]rt+v]fut+Ar]3sh+eVnYpawu]pl2+wAnY]cl.emph2
coVlvAreVnYrYa	coVl]rt+v]fut+Ar]3sh+eVnYrYa]pl2
coVlvAreVnYrYA	coVl]rt+v]fut+Ar]3sh+eVnYrYu]pl2+A]cl.intr2
coVlvAreVnYrYAl	coVl]rt+v]fut+Ar]3sh+eVnYrYAl]pl2
coVlvAreVnYrYAlA	coVl]rt+v]fut+Ar]3sh+eVnYrYAl]pl2+A]cl.intr2
coVlvAreVnYrYAlAvawu	coVl]rt+v]fut+Ar]3sh+eVnYrYAl]pl2+Avawu]cl.min
coVlvAreVnYrYAle	coVl]rt+v]fut+Ar]3sh+eVnYrYAl]pl2+e]cl.emph1
coVlvAreVnYrYAlo	coVl]rt+v]fut+Ar]3sh+eVnYrYAl]pl2+o]cl.intr1
coVlvAreVnYrYAlum	coVl]rt+v]fut+Ar]3sh+eVnYrYAl]pl2+um]cl.incl1
coVlvAreVnYrYavA	coVl]rt+v]fut+Ar]3sh+eVnYrYa]pl2+A]cl.intr2
coVlvAreVnYrYavAvawu	coVl]rt+v]fut+Ar]3sh+eVnYrYa]pl2+Avawu]cl.min
coVlvAreVnYrYAvawu	coVl]rt+v]fut+Ar]3sh+eVnYrYu]pl2+Avawu]cl.min
coVlvAreVnYrYave	coVl]rt+v]fut+Ar]3sh+eVnYrYa]pl2+e]cl.emph1
coVlvAreVnYrYavo	coVl]rt+v]fut+Ar]3sh+eVnYrYa]pl2+o]cl.intr1
coVlvAreVnYrYavum	coVl]rt+v]fut+Ar]3sh+eVnYrYa]pl2+um]cl.incl1
coVlvAreVnYrYe	coVl]rt+v]fut+Ar]3sh+eVnYrYu]pl2+e]cl.emph1
coVlvAreVnYrYo	coVl]rt+v]fut+Ar]3sh+eVnYrYu]pl2+o]cl.intr1
coVlvAreVnYrYu	coVl]rt+v]fut+Ar]3sh+eVnYrYu]pl2
coVlvAreVnYrYum	coVl]rt+v]fut+Ar]3sh+eVnYrYu]pl2+um]cl.incl1
coVlvArkalY	coVl] rt+v] fut+ArkalY]3p/h
coVlvArkalYA	coVl]rt+v]fut+ArkalY]3p/h+A]cl.intr2
coVlvArkalYammA	coVl]rt+v]fut+ArkalY]3p/h+ammA]voc.f
coVlvArkalYAnYAl	coVl]rt+v]fut+ArkalY]3p/h+AnYAl]adm
coVlvArkalYAnYAlpAr	coVl]rt+v]fut+ArkalY]3p/h+AnYAl]adm+pAr]aux
coVlvArkalYappA	coVl]rt+v]fut+ArkalY]3p/h+appA]voc.m
coVlvArkalYatA	coVl]rt+v]fut+ArkalY]3p/h+atA]voc.m
coVlvArkalYatI	coVl]rt+v]fut+ArkalY]3p/h+atI]voc.f
coVlvArkalYayyA	coVl]rt+v]fut+ArkalY]3p/h+ayyA]voc.mh
coVlvArkalYe	coVl]rt+v]fut+ArkalY]3p/h+e]cl.emph1
coVlvArkalYeVnYa	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2
coVlvArkalYeVnYakUta	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+kUta]cl.incl2
coVlvArkalYeVnYamattum	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+mattum]cl.rest
coVlvArkalYeVnYappatuvawA	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVlvArkalYeVnYappatuvawAvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVlvArkalYeVnYappatuvawe	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVlvArkalYeVnYappatuvawo	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVlvArkalYeVnYappatuvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2
coVlvArkalYeVnYappatuvawukUta	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlvArkalYeVnYappatuvawum	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVlvArkalYeVnYappatuvawumattum	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVlvArkalYeVnYappatuvawuwAnY	coVl]rt+v]fut+ArkalY]3p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlvArkalYeVnYavA	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+A]cl.intr2
coVlvArkalYeVnYavAvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+Avawu]cl.min
coVlvArkalYeVnYave	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+e]cl.emph1
coVlvArkalYeVnYavo	coVl]rt+v] fut+ArkalY]3p/h+eVnYa]pl2+o]cl.intr1
coVlvArkalYeVnYavum	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+um]cl.incl1
coVlvArkalYeVnYawAnY	coVl]rt+v]fut+ArkalY]3p/h+eVnYa]pl2+wAnY]cl.emph2
coVlvArkalYeVnYpawA	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+A]cl.intr2
coVlvArkalYeVnYpawAvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+Avawu]cl.min
coVlvArkalYeVnYpawe	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+e]cl.emph1
coVlvArkalYeVnYpawo	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+o]cl.intr1
coVlvArkalYeVnYpawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2
coVlvArkalYeVnYpawukUta	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+kUta]cl.incl2
coVlvArkalYeVnYpawum	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+um]cl.incl1
coVlvArkalYeVnYpawumattum	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+mattum]cl.rest
coVlvArkalYeVnYpawuwAnY	coVl]rt+v]fut+ArkalY]3p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVlvArkalYcVnYrYa	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYa]pl2
coVlvArkalYeVnYrYA	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYu]pl2+A]cl.intr2

coVlvArkalYeVnYrYAl	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYAl]pl2
coVlvArkalYeVnYrYAlA	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYAl]pl2+A]cl.intr2
coVlvArkalYeVnYrYAlAvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYAl]pl2+Avawu]cl.min
coVlvArkalYeVnYrYAle	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYAl]pl2+e]cl.emph1
coVlvArkalYeVnYrYAlo	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYAl]pl2+o]cl.intr1
coVlvArkalYeVnYrYAlum	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYAl]pl2+um]cl.incl1
coVlvArkalYeVnYrYavA	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYa]pl2+A]cl.intr2
coVlvArkalYeVnYrYavAvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYa]pl2+Avawu]cl.min
coVlvArkalYeVnYrYAvawu	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYu]pl2+Avawu]cl.min
coVlvArkalYeVnYrYave	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYa]pl2+e]cl.emph1
coVlvArkalYcVnYrYavo	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYa]pl2+o]cl.intr1
coVlvArkalYeVnYrYavum	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYa]pl2+um]cl.incl1
coVlvArkalYeVnYrYe	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYu]pl2+e]cl.emph1
coVlvArkalYeVnYrYo	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYu]pl2+o]cl.intr1
coVlvArkalYeVnYrYu	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYu]pl2
coVlvArkalYeVnYrYum	coVl]rt+v]fut+ArkalY]3p/h+eVnYrYu]pl2+um]cl.incl1
coVlvArkalYo	coVl]rt+v]fut+ArkalY]3p/h+o]cl.intr1
coVlvAro	coVl]rt+v]fut+Ar]3sh+o]cl.intr1
coVlvArkalYpAr	coVl]rt+v]fut+ArkalY]3p/h+pAr]aux
coVlvArpAr	coVl]rt+v]fut+Ar]3sh+pAr]aux
coVlvawanYmUlam	coVl]rt+v]fut+awanY]gen+mUlam]pl1
coVlvawanYmUlamA	coVl]rt+v]fut+awanY]gen+mUlam]pl1+A]cl.intr2
coVlvawanYmUlamAvawu	coVl]rt+v]fut+awanY]gen+mUlam]pl1+Avawu]cl.min
coVlvawanYmUlame	coVl]rt+v]fut+awanY]gen+mUlam]pl1+e]cl.emph1
coVlvawanYmUlamkUta	coVl]rt+v]fut+awanY]gen+mUlam]pl1+kUta]cl.incl2
coVlvawanYmUlammattum	coVl]rt+v]fut+awanY]gen+mUlam]pl1+mattum]cl.rest
coVlvawanYmUlamo	coVl]rt+v]fut+awanY]gen+mUlam]pl1+o]cl.intr1
coVlvawanYmUlamum	coVl]rt+v]fut+awanY]gen+mUlam]pl1+um]cl.incl1
coVlvawanYmUlamwAnY	coVl]rt+v]fut+awanY]gen+mUlam]pl1+wAnY]cl.emph2
coVlvawarYkappuram	coVl] rt+v] fut+awarYku] dat+appuram] adv
coVlvawarYkappuramA	coVl]rt+v]fut+awarYku]dat+appuram]adv+A]cl.intr2
coVlvawarYkappuramAvawu	coVl]rt+v]fut+awarYku]dat+appuram]adv+Avawu]cl.min
coVlvawarYkappurame	coVl]rt+v]fut+awarYku]dat+appuram]adv+e]cl.emph1
coVlvawarYkappuramkUta	coVl]rt+v]fut+awarYku]dat+appuram]adv+kUta]cl.incl2
coVlvawarYkappurammattum	coVl]rt+v]fut+awarYku]dat+appuram]adv+mattum]cl.rest
coVlvawarYkappuramo	coVl]rt+v]fut+awarYku]dat+appuram]adv+o]cl.intr1
coVlvawarYkappuramum	coVl]rt+v]fut+awarYku]dat+appuram]adv+um]cl.incl1
coVlvawarYkappuramwAnY	coVl]rt+v]fut+awarYku]dat+appuram]adv+wAnY]cl.emph2
coVlvawarYkumunY	coVl]rt+v]fut+awarYku]dat+munY]adv
coVlvawarYkumunYnYA	coVl]rt+v]fut+awarYku]dat+munY]adv]+A]cl.intr2
coVlvawarYkumunYnYAvawu	coVl]rt+v]fut+awarYku]dat+munY]adv]+Avawu]cl.min
coVlvawarYkumunYnYe	coVl]rt+v]fut+awarYku]dat+munY]adv]+e]cl.emph1
coVlvawarYkumunYkUta	coVl]rt+v]fut+awarYku]dat+munY]adv]+kUta]cl.incl2
coVlvawarYkumunYmattum	coVl]rt+v]fut+awarYku]dat+munY]adv]+mattum]cl.rest
coVlvawarYkumunYnYA	coVl]rt+v]fut+awarYku]dat+munY]adv]+A]cl.intr2
coVlvawarYkumunYnYAl	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv
coVlvawarYkumunYnYAlA	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+A]cl.intr2
coVlvawarYkumunYnYAlAvawu	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+Avawu]cl.min
coVlvawarYkumunYnYAle	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+e]cl.emph1
coVlvawarYkumunYnYAlkUta	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+kUta]cl.incl2
coVlvawarYkumunYnYAlmattum	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+mattum]cl.rest
coVlvawarYkumunYnYAlo	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+o]cl.intr1
coVlvawarYkumunYnYAlum	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+um]cl.incl1
coVlvawarYkumunYnYAlwAnY	coVl]rt+v]fut+awarYku]dat+munYnYAl]adv+wAnY]cl.emph2
coVlvawarYkumunYnYAvawu	coVl]rt+v]fut+awarYku]dat+munY]adv]+Avawu]cl.min
coVlvawarYkumunYnYe	coVl]rt+v]fut+awarYku]dat+munY]adv]+e]cl.emph1
coVlvawarYkumunYnYo	coVl]rt+v]fut+awarYku]dat+munY]adv]+o]cl.intr1
coVlvawarYkumunYnYum	coVl]rt+v]fut+awarYku]dat+munY]adv]+um]cl.incl1
coVlvawarYkumunYnYo	coVl]rt+v]fut+awarYku]dat+munY]adv]+o]cl.intr1
coVlvawarYkumunYpA	coVl]rt+v]fut+awarYku]dat+munYpu]adv+A]cl.intr2
coVlvawarYkumunYpAvawu	coVl]rt+v]fut+awarYku]dat+munYpu]adv+Avawu]cl.min
coVlvawarYkumunYpe	coVl]rt+v]fut+awarYku]dat+munYpu]adv+e]cl.emph1
coVlvawarYkumunYpo	coVl]rt+v]fut+awarYku]dat+munYpu]adv+o]cl.intr1
coVlvawarYkumunYpu	coVl]rt+v]fut+awarYku]dat+munYpu]adv
coVlvawarYkumunYpukUta	coVl]rt+v]fut+awarYku]dat+munYpu]adv+kUta]cl.incl2
coVlvawarYkumunYpukUta	coVl]rt+v]fut+awarYku]dat+munYpu]adv+kUta]cl.incl2
coVlvawarYkumunYpum	coVl]rt+v]fut+awarYku]dat+munYpu]adv+um]cl.incl1
coVlvawarYkumunYpumattum	coVl]rt+v]fut+awarYku]dat+munYpu]adv+mattum]cl.rest

coVlvawarYkumunYpuwAnY
coVlvawarYkumunYnYum
coVlvawarYkumunYwAnY
coVlvawarYkuppinY
coVlvawarYkuppinYnYA
coVlvawarYkuppinYnYAvawu
coVlvawarYkuppinYnYe
coVlvawarYkuppinYkUta
coVlvawarYkuppinYmattum
coVlvawarYkuppinYnYA
coVlvawarYkuppinYnYAl
coVlvawarYkuppinYnYAlA
coVlvawarYkuppinYnYAlAvawu
coVlvawarYkuppinYnYAle
coVlvawarYkuppinYnYAlkUta
coVlvawarYkuppinYnYAlmattum
coVlvawarYkuppinYnYAlo
coVlvawarYkuppinYnYAlum
coVlvawarYkuppinYnYAlwAnY
coVlvawarYkuppinYnYAvawu
coVlvawarYkuppinYnYe
coVlvawarYkuppinYnYo
coVlvawarYkuppinYnYum
coVlvawarYkuppinYnYo
coVlvawarYkuppinYpA
coVlvawarYkuppinYpAvawu
coVlvawarYkuppinYpe
coVlvawarYkuppinYpo
coVlvawarYkuppinYpu
coVlvawarYkuppinYpukUta
coVlvawarYkuppinYpukUta
coVlvawarYkuppinYpum
coVlvawarYkuppinYpumattum
coVlvawarYkuppinYpuwAnY
coVlvawarYkuppinYpukUta
coVlvawarYkuppinYnYum
coVlvawarYkuppinYmattum
coVlvawarYkuppinYpuwAnY
coVlvawarYkuppinYwAnY
coVlvawavaciyam
coVlvawavaciyamA
coVlvawavaciyamAvawu
coVlvawavaciyame
coVlvawavaciyamkUta
coVlvawavaciyammattum
coVlvawavaciyamo
coVlvawavaciyamum
coVlvawavaciyamwAnY
coVlvawEpol
coVlvawEpola
coVlvawEpolA
coVlvawEpolakUta
coVlvawEpolamattum
coVlvawEpolavA
coVlvawEpolavAvawu
coVlvawEpolAvawu
coVlvawEpolave
coVlvawEpolavo
coVlvawEpolavum
coVlvawEpolawAnY
coVlvawEpole
coVlvawEpolkUta
coVlvawEpolmattum
coVlvawEpolo
coVlvawEpolum
coVlvawEpolwAnY
coVlvawEponYrYa
coVlvawEponYrYA

coVl]rt+v]fut+awarYku]dat+munYpu]adv+wAnY]cl.emph2
coVl]rt+v]fut+awarYku]dat+munY]adv]+um]cl.incl1
coVl]rt+v]fut+awarYku]dat+munY]adv]+wAnY]cl.emph2
coVl]rt+v]fut+awarYku]dat+pinY]adv
coVl]rt+v]fut+awarYku]dat+pinY]adv+A]cl.intr2
coVl]rt+v]fut+awarYku]dat+pinY]adv+Avawu]cl.min
coVl]rt+v]fut+awarYku]dat+pinY]adv+e]cl.emph1
coVl]rt+v]fut+awarYku]dat+pinY]adv+kUta]cl.incl2
coVl]rt+v]fut+awarYku]dat+pinY]adv+mattum]cl.rest
coVl]rt+v]fut+awarYku]dat+pinY]adv+A]cl.intr2
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+A]cl.intr2
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+Avawu]cl.min
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+e]cl.emph1
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+kUta]cl.incl2
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+mattum]cl.rest
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+o]cl.intr1
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+um]cl.incl1
coVl]rt+v]fut+awarYku]dat+pinYnYAl]adv+wAnY]cl.emph2
coVl]rt+v]fut+awarYku]dat+pinY]adv+Avawu]cl.min
coVl]rt+v]fut+awarYku]dat+pinY]adv+e]cl.emph1
coVl]rt+v]fut+awarYku]dat+pinY]adv+o]cl.intr1
coVl]rt+v]fut+awarYku]dat+pinY]adv+um]cl.incl1
coVl]rt+v]fut+awarYku]dat+pinY]adv+o]cl.intr1
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+A]cl.intr2
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+Avawu]cl.min
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+e]cl.emph1
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+o]cl.intr1
coVl]rt+v]fut+awarYku]dat+pinYpu]adv
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+kUta]cl.incl2
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+kUta]cl.incl2
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+um]cl.incl1
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+mattum]cl.rest
coVl]rt+v]fut+awarYku]dat+pinYpu]adv+wAnY]cl.emph2
coVl]rt+v]fut+awarYku]dat+pinYpu+kUta]cl.incl2
coVl]rt+v]fut+awarYku]dat+pinY]adv+um]cl.incl1
coVl]rt+v]fut+awarYku]dat+pinY+mattum]cl.rest
coVl]rt+v]fut+awarYku]dat+pinYpu+wAnY]cl.emph2
coVl]rt+v]fut+awarYku]dat+pinY]adv+wAnY]cl.emph2
coVl]rt+v]fut+awu]+avaciyam
coVl]rt+v]fut+awu]+avaciyam+A]cl.intr2
coVl]rt+v]fut+awu]+avaciyam+Avawu]cl.min
coVl]rt+v]fut+awu]+avaciyam+e]cl.emph1
coVl]rt+v]fut+awu]+avaciyam+kUta]cl.incl2
coVl]rt+v]fut+awu]+avaciyam+mattum]cl.rest
coVl]rt+v]fut+awu]+avaciyam+o]cl.intr1
coVl]rt+v]fut+awu]+avaciyam+um]cl.incl1
coVl]rt+v]fut+awu]+avaciyam+wAnY]cl.emph2
coVl]rt+v]fut+awE]acc+pol]pl1
coVl]rt+v]fut+awE]acc+pola]pl1
coVl]rt+v]fut+awE]acc+pol]pl1+A]cl.intr2
coVl]rt+v]fut+awE]acc+pola]pl1+kUta]cl.incl2
coVl]rt+v]fut+awE]acc+pola]pl1+mattum]cl.rest
coVl]rt+v]fut+awE]acc+pola]pl1+A]cl.intr2
coVl]rt+v]fut+awE]acc+pola]pl1+Avawu]cl.min
coVl]rt+v]fut+awE]acc+pol]pl1+Avawu]cl.min
coVl]rt+v]fut+awE]acc+pola]pl1+e]cl.emph1
coVl]rt+v]fut+awE]acc+pola]pl1+o]cl.intr1
coVl]rt+v]fut+awE]acc+pola]pl1+um]cl.incl1
coVl]rt+v]fut+awE]acc+pola]pl1+wAnY]cl.emph2
coVl]rt+v]fut+awE]acc+pol]pl1+e]cl.emph1
coVl]rt+v]fut+awE]acc+pol]pl1+kUta]cl.incl2
coVl]rt+v]fut+awE]acc+pol]pl1+mattum]cl.rest
coVl]rt+v]fut+awE]acc+pol]pl1+o]cl.intr1
coVl]rt+v]fut+awE]acc+pol]pl1+um]cl.incl1
coVl]rt+v]fut+awE]acc+pol]pl1+wAnY]cl.emph2
coVl]rt+v]fut+awE]acc+ponYrYa]pl1
coVl]rt+v]fut+awE]acc+ponYrYu]pl1+A]cl.intr2

coVlvawEponYrYavA	coVl]rt+v]fut+awE]acc+ponYrYa]pl1A]cl.intr2
coVlvawEponYrYavAvawu	coVl]rt+v]fut+awE]acc+ponYrYa]pl1Avawu]cl.min
coVlvawEponYrYAvawu	coVl]rt+v]fut+awE]acc+ponYrYu]pl1+Avawu]cl.min
coVlvawEponYrYave	coVl]rt+v]fut+awE]acc+ponYrYa]pl1e]cl.emph1
coVlvawEponYrYavo	coVl]rt+v]fut+awE]acc+ponYrYa]pl1o]cl.intr1
coVlvawEponYrYavum	coVl]rt+v]fut+awE]acc+ponYrYa]pl1um]cl.incl1
coVlvawEponYrYe	roVI]rt+Tlfut+awE]acc+ponYrYu]pll+e]cl.emphl
coVlvawEponYrYo	coVl]rt+v]fut+awE]acc+ponYrYu]pl1+o]cl.intr1
coVlvawEponYrYu	coVl]rt+v]fut+awE]acc+ponYrYu]pl1
coVlvawEponYrYukUta	coVl]rt+v]fut+awE]acc+ponYrYu]pl1+kUta]cl.incl2
coVlvawEponYrYum	coVl]rt+v]fut+awE]acc+ponYrYu]pl1+um]cl.incl1
coVlvawEponYrYumattum	coVl]rt+v]fut+awE]acc+ponYrYu]pl1+mattum]cl.rest
coVlvawEponYrYuwAnY	coVl]rt+v]fut+awE]acc+ponYrYu]pl1+wAnY]cl.emph2
coVlvawEpoVruwwA	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+A]cl.intr2
coVlvawEpoVruwwAvawu	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+Avawu]cl.min
coVlvawEpoVruwwe	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+e]cl.emph1
coVlvawEpoVruwwo	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+o]cl.intr1
coVlvawEpoVruwwu	coVl]rt+v]fut+awE]acc+poVruwwu]pl1
coVlvawEpoVruwwukUta	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+kUta]cl.incl2
coVlvawEpoVruwwum	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+um]cl.incl1
coVlvawEpoVruwwumattum	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+mattum]cl.rest
coVlvawEpoVruwwuwAnY	coVl]rt+v]fut+awE]acc+poVruwwu]pl1+wAnY]cl.emph2
coVlvawEwavira	coVl]rt+v]fut+awE]acc+wavira]pl1
coVlvawEwaviraUta	coVl]rt+v]fut+awE]acc+wavira]pl1+kUta]cl.incl2
coVlvawEwaviramattum	coVl]rt+v]fut+awE]acc+wavira]pl1+mattum]cl.rest
coVlvawEwaviravA	coVl]rt+v]fut+awE]acc+wavira]pl1+A]cl.intr2
coVlvawEwaviravAvawu	coVl]rt+v]fut+awE]acc+wavira]pl1+Avawu]cl.min
coVlvawEwavirave	coVl]rt+v]fut+awE]acc+wavira]pl1+e]cl.emph1
coVlvawEwaviravo	coVl]rt+v]fut+awE]acc+wavira]pl1+o]cl.intr1
coVlvawEwaviravum	coVl]rt+v]fut+awE]acc+wavira]pl1+um]cl.incl1
coVlvawEwavirawAnY	coVl]rt+v]fut+awE]acc+wavira]pl1+wAnY]cl.emph2
coVlvawanYpati	coVl]rt+v]fut+awanY]gen+pati]pl1
coVlvawanYpatiyA	coVl]rt+v]fut+awanY]gen+pati]pl1+A]cl.intr2
coVlvawanYpatiyAvawu	coVl]rt+v]fut+awanY]gen+pati]pl1+Avawu]cl.min
coVlvawanYpatiye	coVl]rt+v]fut+awanY]gen+pati]pl1+e]cl.emph1
coVlvawanYpatikkUta	coVl]rt+v]fut+awanY]gen+pati]pl1+kUta]cl.incl2
coVlvawanYpatimattum	coVl]rt+v]fut+awanY]gen+pati]pl1+mattum]cl.rest
coVlvawanYpatiyo	coVl]rt+v]fut+awanY]gen+pati]pl1+o]cl.intr1
coVlvawanYpatiyum	coVl]rt+v]fut+awanY]gen+pati]pl1+um]cl.incl1
coVlvawanYpatiwAnY	coVl]rt+v]fut+awanY]gen+pati]pl1+wAnY]cl.emph2
coVlvAy	coVl]rt+v]fut+Ay]2s
coVlvAyA	coVl]rt+v]fut+Ay]2s+A]cl.intr2
coVlvAyammA	coVl]rt+v]fut+Ay]2s+ammA]voc.f
coVlvAyAnYAl	coVl]rt+v]fut+Ay]2s+AnYAl]adm
coVlvAyAnYAlpAr	coVl]rt+v]fut+Ay]2s+AnYAl]adm+pAr]aux
coVlvAyappA	coVl]rt+v]fut+Ay]2s+appA]voc.m
coVlvAyatA	coVl]rt+v]fut+Ay]2s+atA]voc.m
coVlvAyatI	coVl]rt+v]fut+Ay]2s+atI]voc.f
coVlvAyayyA	coVl]rt+v]fut+Ay]2s+ayyA]voc.mh
coVlvAye	coVl]rt+v]fut+Ay]2s+e]cl.emph1
coVlvAyeVnYa	coVl]rt+v]fut+Ay]2s+eVnYa]pl2
coVlvAyeVnYakUta	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+kUta]cl.incl2
coVlvAyeVnYamattum	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+mattum]cl.rest
coVlvAyeVnYappatuvawA	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+A]cl.intr2
coVlvAyeVnYappatuvawAvawu	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+Avawu]cl.min
coVlvAyeVnYappatuvawe	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+e]cl.emph1
coVlvAyeVnYappatuvawo	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+o]cl.intr1
coVlvAyeVnYappatuvawu	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2
coVlvAyeVnYappatuvawukUta	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlvAyeVnYappatuvawum	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+um]cl.incl1
coVlvAyeVnYappatuvawumattum	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+mattum]cl.rest
coVlvAycVnYappatuvawuwAnY	coVl]rt+v]fut+Ay]2s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlvAyeVnYavA	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+A]cl.intr2
coVlvAyeVnYavAvawu	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+Avawu]cl.min
coVlvAyeVnYave	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+e]cl.emph1
coVlvAyeVnYavo	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+o]cl.intr1
coVlvAyeVnYavum	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+um]cl.incl1
coVlvAyeVnYawAnY	coVl]rt+v]fut+Ay]2s+eVnYa]pl2+wAnY]cl.emph2

coVlvAyeVnYpawA	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+A]cl.intr2
coVlvAyeVnYpawAvawu	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+Avawu]cl.min
coVlvAyeVnYpawe	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+e]cl.emph1
coVlvAyeVnYpawo	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+o]cl.intr1
coVlvAyeVnYpawu	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2
coVlvAyeVnYpawukUta	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+kUta]cl.incl2
coVlvAyeVnYpawum	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+um]cl.incl1
coVlvAyeVnYpawumattum	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+mattum]cl.rest
coVlvAyeVnYpawuwAnY	coVl]rt+v]fut+Ay]2s+eVnYpawu]pl2+wAnY]cl.emph2
coVlvAyeVnYrYa	coVl]rt+v]fut+Ay]2s+eVnYrYa]pl2
coVlvAyeVnYrYA	coVl]rt+v]fut+Ay]2s+eVnYrYu]pl2+A]cl.intr2
coVlvAyeVnYrYAl	coVl]rt+v]fut+Ay]2s+eVnYrYAl]pl2
coVlvAyeVnYrYAlA	coVl]rt+v]fut+Ay]2s+eVnYrYAl]pl2+A]cl.intr2
coVlvAyeVnYrYAlAvawu	coVl]rt+v]fut+Ay]2s+eVnYrYAl]pl2+Avawu]cl.min
coVlvAyeVnYrYAle	coVl]rt+v]fut+Ay]2s+eVnYrYAl]pl2+e]cl.emph1
coVlvAyeVnYrYAlo	coVl]rt+v]fut+Ay]2s+eVnYrYAl]pl2+o]cl.intr1
coVlvAyeVnYrYAlum	coVl]rt+v]fut+Ay]2s+eVnYrYAl]pl2+um]cl.incl1
coVlvAyeVnYrYavA	coVl]rt+v]fut+Ay]2s+eVnYrYa]pl2+A]cl.intr2
coVlvAyeVnYrYavAvawu	coVl]rt+v]fut+Ay]2s+eVnYrYa]pl2+Avawu]cl.min
coVlvAyeVnYrYAvawu	coVl]rt+v]fut+Ay]2s+eVnYrYu]pl2+Avawu]cl.min
coVlvAyeVnYrYave	coVl]rt+v]fut+Ay]2s+eVnYrYa]pl2+e]cl.emph1
coVlvAyeVnYrYavo	coVl]rt+v]fut+Ay]2s+eVnYrYa]pl2+o]cl.intr1
coVlvAyeVnYrYavum	coVl]rt+v]fut+Ay]2s+eVnYrYa]pl2+um]cl.incl1
coVlvAyeVnYrYe	coVl]rt+v]fut+Ay]2s+eVnYrYu]pl2+e]cl.emph1
coVlvAyeVnYrYo	coVl]rt+v]fut+Ay]2s+eVnYrYu]pl2+o]cl.intr1
coVlvAyeVnYrYu	coVl]rt+v]fut+Ay]2s+eVnYrYu]pl2
coVlvAyeVnYrYum	coVl]rt+v]fut+Ay]2s+eVnYrYu]pl2+um]cl.incl1
coVlvAyo	coVl]rt+v]fut+Ay]2s+o]cl.intr1
coVlvAypAr	coVl]rt+v]fut+Ay]2s+pAr]aux
coVlvelY	coVl]rt+v]fut]+elY]2sh.br
coVlvelYA	coVl]rt+v]fut]+elY]2sh.br+A]cl.intr2
coVlvelYammA	coVl]rt+v]fut]+elY]2sh.br+ammA]voc.f
coVlvelYAnYAl	coVl]rt+v]fut]+elY]2sh.br+AnYAl]adm
coVlvelYappA	coVl]rt+v]fut]+elY]2sh.br+appA]voc.m
coVlvelYatA	coVl]rt+v]fut]+elY]2sh.br+atA]voc.m
coVlvelYatl	coVl]rt+v]fut]+elY]2sh.br+atl]voc.f
coVlvelYayyA	coVl]rt+v]fut]+elY]2sh.br+ayyA]voc.mh
coVlvelYe	coVl]rt+v]fut]+elY]2sh.br+e]cl.emph1
coVlvelYeVnYa	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2
coVlvelYeVnYakUta	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+kUta]cl.incl2
coVlvelYeVnYamattum	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+mattum]cl.rest
coVlvelYeVnYappatuvawA	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+A]cl.intr2
coVlvelYeVnYappatuvawAvawu	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+Avawu]cl.min
coVlvelYeVnYappatuvawe	*coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+e]cl.emph1*
coVlvelYeVnYappatuvawo	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+o]cl.intr1
coVlvelYeVnYappatuvawu	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2
coVlvelYeVnYappatuvawukUta	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+kUta]cl.incl2
coVlvelYeVnYappatuvawum	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+um]cl.incl1
coVlvelYeVnYappatuvawumattum	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+mattum]cl.rest
coVlvelYeVnYappatuvawuwAnY	coVl]rt+v]fut]+elY]2sh.br+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlvelYeVnYavA	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+A]cl.intr2
coVlvelYeVnYavAvawu	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+Avawu]cl.min
coVlvelYeVnYave	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+e]cl.emph1
coVlvelYeVnYavo	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+o]cl.intr1
coVlvelYeVnYavum	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+um]cl.incl1
coVlvelYeVnYawAnY	coVl]rt+v]fut]+elY]2sh.br+eVnYa]pl2+wAnY]cl.emph2
coVlvelYeVnYpawA	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+A]cl.intr2
coVlvelYeVnYpawAvawu	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+Avawu]cl.min
coVlvelYeVnYpawe	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+e]cl.emph1
coVlvelYeVnYpawo	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+o]cl.intr1
coVlvelYeVnYpawu	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2
coVlvelYeVnYpawukUta	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+kUta]cl.incl2
coVlvelYeVnYpawum	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+um]cl.incl1
coVlvelYeVnYpawumattum	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+mattum]cl.rest
coVlvelYeVnYpawuwAnY	coVl]rt+v]fut]+elY]2sh.br+eVnYpawu]pl2+wAnY]cl.emph2
coVlvelYeVnYrYa	coVl]rt+v]fut]+elY]2sh.br+eVnYrYa]pl2
coVlvelYeVnYrYA	coVl]rt+v]fut]+elY]2sh.br+eVnYrYu]pl2+A]cl.intr2
coVlvelYeVnYrYAl	coVl]rt+v]fut]+elY]2sh.br+eVnYrYAl]pl2

coVlvelYeVnYrYAlA
coVlvelYeVnYrYAlAvawu
coVlvelYeVnYrYAle
coVlvelYeVnYrYAlo
coVlvelYeVnYrYAlum
coVlvelYeVnYrYavA
coVlvelYeVnYrYavAvawu
coVlvelYeVnYrYAvawu
coVlvelYeVnYrYave
coVlvelYeVnYrYavo
coVlvelYeVnYrYavum
coVlvelYeVnYrYe
coVlvelYeVnYrYo
coVlvelYeVnYrYu
coVlvelYeVnYrYum
coVlvelYo
coVlvenY
coVlvenYA
coVlvenYammA
coVlvenYAnYAl
coVlvenYAnYAlpAr
coVlvenYappA
coVlvenYatA
coVlvenYatl
coVlvenYayyA
coVlvenYe
coVlvenYeVnYa
coVlvenYeVnYakUta
coVlvenYeVnYamattum
coVlvenYeVnYappatuvawA
coVlvenYeVnYappatuvawAvawu
coVlvenYeVnYappatuvawe
coVlvenYeVnYappatuvawo
coVlvenYeVnYappatuvawu
coVlvenYeVnYappatuvawukUta
coVlvenYeVnYappatuvawum
coVlvenYeVnYappatuvawumattum
coVlvenYeVnYappatuvawuwAnY
coVlvenYeVnYavA
coVlvenYeVnYavAvawu
coVlvenYeVnYave
coVlvenYeVnYavo
coVlvenYeVnYavum
coVlvenYeVnYawAnY
coVlvenYeVnYpawA
coVlvenYeVnYpawAvawu
coVlvenYeVnYpawe
coVlvenYeVnYpawo
coVlvenYeVnYpawu
coVlvenYeVnYpawukUta
coVlvenYeVnYpawum
coVlvenYeVnYpawumattum
coVlvenYeVnYpawuwAnY
coVlvenYeVnYrYa
coVlvenYeVnYrYA
coVlvenYeVnYrYAl
coVlvenYeVnYrYAlA
coVlvenYeVnYrYAlAvawu
coVlvenYeVnYrYAle
coVlvenYeVnYrYAlo
coVlvenYeVnYrYAlum
coVlvenYeVnYrYavA
coVlvenYeVnYrYavAvawu
coVlvenYeVnYrYAvawu
coVlvenYeVnYrYave
coVlvenYeVnYrYavo
coVlvenYeVnYrYavum
coVlvenYeVnYrYe

coVl]rt+v]fut]+elY]2sh.br+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+v]fut]+elY]2sh.br+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+v]fut]+elY]2sh.br+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYa]pl2+A]cl.intr2
coVl]rt+v]fut]+elY]2sh.br+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+v]fut]+elY]2sh.br+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+v]fut]+elY]2sh.br+eVnYrYa]pl2+e]cl.emph1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYa]pl2+o]cl.intr1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYa]pl2+um]cl.incl1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYu]pl2+e]cl.emph1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYu]pl2+o]cl.intr1
coVl]rt+v]fut]+elY]2sh.br+eVnYrYu]pl2
coVl]rt+v]fut]+elY]2sh.br+eVnYrYu]pl2+um]cl.incl1
coVl]rt+v]fut]+elY]2sh.br+o]cl.intr1
coVl]rt+v]fut]+enY]1s
coVl]rt+v]fut]+enY]1s+A]cl.intr2
coVl]rt+v]fut]+enY]1s+ammA]voc.f
coVl]rt+v]fut]+enY]1s+AnYAl]adm
coVl]rt+v]fut]+enY]1s+AnYAl]adm+pAr]aux
coVl]rt+v]fut]+enY]1s+appA]voc.m
coVl]rt+v]fut]+enY]1s+atA]voc.m
coVl]rt+v]fut]+enY]1s+atI]voc.f
coVl]rt+v]fut]+enY]1s+ayyA]voc.mh
coVl]rt+v]fut]+enY]1s+e]cl.emph1
coVl]rt+v]fut]+enY]1s+eVnYa] **pl2**
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+kUta]cl.incl2
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+mattum]cl.rest
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+kUta] **d.incl2**
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+v]fut]+enY]1s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+A]cl.intr2
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+Avawu]cl.min
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+e]cl.emph1
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+o]cl.intr1
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+um]cl.incl1
coVl]rt+v]fut]+enY]1s+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+A]cl.intr2
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+e]cl.emph1
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+o]cl.intr1
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+um]cl.incl1
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+v]fut]+enY]1s+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut]+enY]1s+eVnYrYa]pl2
coVl]rt+v]fut]+enY]1s+eVnYrYu]pl2+A]cl.intr2
coVl]rt+v]fut]+enY]1s+eVnYrYA]pl2
coVl]rt+v]fut]+enY]1s+eVnYrYA]pl2+A]cl.intr2
coVl]rt+v]fut]+enY]1s+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+v]fut]+enY]1s+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+v]fut]+enY]1s+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+v]fut]+enY]1s+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+v]fut]+enY]1s+eVnYrYa]pl2+A]cl.intr2
coVl]rt+v]fut]+enY]1s+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+v]fut]+enY]1s+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+v]fut]+enY]1s+eVnYrYa]pl2+e]cl.emph1
coVl]rt+v]fut]+enY]1s+eVnYrYa]pl2+o]cl.intr1
coVl]rt+v]fut]+enY]1s+eVnYrYa]pl2+um]cl.incl1
coVl]rt+v]fut]+enY]1s+eVnYrYu]pl2+e]cl.emph1

coVlvenYeVnYrYo
coVlvenYeVnYrYu
coVlvenYeVnYrYum
coVlvenYo
coVlvenYpAr
coVlvIr
coVlvIrA
coVlvIrammA
coVlvIrAnYAl
coVlvIrappA
coVlvIratA
coVlvIratI
coVlvIrayyA
coVlvIre
coVlvIreVnYa
coVlvIreVnYakUta
coVlvIreVnYamattum
coVlvIreVnYappatuvawA
coVlvIreVnYappatuvawAvawu
coVlvIreVnYappatuvawe
coVlvIreVnYappatuvawo
coVlvIreVnYappatuvawu
coVlvIreVnYappatuvawukUta
coVlvIreVnYappatuvawum
coVlvIreVnYappatuvawumattum
coVlvIreVnYappatuvawuwAnY
coVlvIreVnYavA
coVlvIreVnYavAvawu
coVlvIreVnYave
coVlvIreVnYavo
coVlvIreVnYavum
coVlvIreVnYawAnY
coVlvIreVnYpawA
coVlvIreVnYpawAvawu
coVlvIreVnYpawe
coVlvIreVnYpawo
coVlvIreVnYpawu
coVlvIreVnYpawukUta
coVlvIreVnYpawum
coVlvIreVnYpawumattum
coVlvIreVnYpawuwAnY
coVlvIreVnYrYa
coVlvIreVnYrYA
coVlvIreVnYrYAl
coVlvIreVnYrYAlA
coVlvIreVnYrYAlAvawu
coVlvIreVnYrYAle
coVlvIreVnYrYAlo
coVlvIreVnYrYAlum
coVlvIreVnYrYavA
coVlvIreVnYrYavAvawu
coVlvIreVnYrYAvawu
coVlvIreVnYrYave
coVlvIreVnYrYavo
coVlvIreVnYrYavum
coVlvIreVnYrYe
coVlvIreVnYrYo
coVlvIreVnYrYu
coVlvIreVnYrYum
coVlvIrkalY
coVlvIrkalYA
coVlvIrkalYammA
coVlvIrkalYAnYAl
coVlvIrkalYappA
coVlvIrkalYatA
coVlvIrkalYatI
coVlvIrkalYayyA
coVlvIrkalYe

coVl]rt+v]fut]+enY]1s+eVnYrYu]pl2+o]cl.intr1
coVl]rt+v]fut]+enY]1s+eVnYrYu]pl2
coVl]rt+v]fut]+enY]1s+eVnYrYu]pl2+um]cl.incl1
coVl]rt+v]fut]+enY]1s+o]cl.intr1
coVl]rt+v]fut]+enY]1s+pAr]aux
coVl]rt+v]fut+Ir]2shl/p
coVl]rt+v]fut+Ir]2shl/p+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+ammA]voc.f
coVl]rt+v]fut+Ir]2shl/p+AnYAl]adm
coVl]rt+v]fut+Ir]2shl/p+appA]voc.m
coVl]rt+v]fut+Ir]2shl/p+atA]voc.m
coVl]rt+v]fut+Ir]2shl/p+atI]voc.f
coVl]rt+v]fut+Ir]2shl/p+ayyA]voc.mh
coVl]rt+v]fut+Ir]2shl/p+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+kUta]cl.incl2
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+mattum]cl.rest
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+v]fut+Ir]2shl/p+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+Avawu]cl.min
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+um]cl.incl1
coVl]rt+v]fut+Ir]2shl/p+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+um]cl.incl1
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+v]fut+Ir]2shl/p+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYa]pl2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYu]pl2+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYAl]pl2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+v]fut+Ir]2shl/p+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYa]pl2+A]cl.intr2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+v]fut+Ir]2shl/p+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+v]fut+Ir]2shl/p+eVnYrYa]pl2+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYa]pl2+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYa]pl2+um]cl.incl1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYu]pl2+e]cl.emph1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYu]pl2+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+eVnYrYu]pl2
coVl]rt+v]fut+Ir]2shl/p+eVnYrYu]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h
coVl]rt+v]fut+IrkalY]2p/h+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+ammA]voc.f
coVl]rt+v]fut+IrkalY]2p/h+AnYAl]adm
coVl]rt+v]fut+IrkalY]2p/h+appA]voc.m
coVl]rt+v]fut+IrkalY]2p/h+atA]voc.m
coVl]rt+v]fut+IrkalY]2p/h+atI]voc.f
coVl]rt+v]fut+IrkalY]2p/h+ayyA]voc.mh
coVl]rt+v]fut+IrkalY]2p/h+e]cl.emph1

coVlvIrkalYeVnYa
coVlvIrkalYeVnYakUta
coVlvIrkalYeVnYamattum
coVlvIrkalYeVnYappatuvawA
coVlvIrkalYeVnYappatuvawAvawu
coVlvIrkalYeVnYappatuvawe
coVlvIrkalYeVnYappatuvawo
coVlvIrkalYeVnYappatuvawu
coVlvIrkalYeVnYappatuvawukUta
coVlvIrkalYeVnYappatuvawum
coVlvIrkalYeVnYappatuvawumattum
coVlvIrkalYeVnYappatuvawuwAnY
coVlvIrkalYeVnYavA
coVlvIrkalYeVnYavAvawu
coVlvIrkalYeVnYave
coVlvIrkalYeVnYavo
coVlvIrkalYeVnYavum
coVlvIrkalYeVnYawAnY
coVlvIrkalYeVnYpawA
coVlvIrkalYeVnYpawAvawu
coVlvIrkalYeVnYpawe
coVlvIrkalYeVnYpawo
coVlvIrkalYeVnYpawu
coVlvIrkalYeVnYpawukUta
coVlvIrkalYeVnYpawum
coVlvIrkalYeVnYpawumattum
coVlvIrkalYeVnYpawuwAnY
coVlvIrkalYeVnYrYa
coVlvIrkalYeVnYrYA
coVlvIrkalYeVnYrYAl
coVlvIrkalYeVnYrYAlA
coVlvIrkalYeVnYrYAlAvawu
coVlvIrkalYeVnYrYAle
coVlvIrkalYeVnYrYAlo
coVlvIrkalYeVnYrYAlum
coVlvIrkalYeVnYrYavA
coVlvIrkalYeVnYrYavAvawu
coVlvIrkalYeVnYrYAvawu
coVlvIrkalYeVnYrYave
coVlvIrkalYeVnYrYavo
coVlvIrkalYeVnYrYavum
coVlvIrkalYeVnYrYe
coVlvIrkalYeVnYrYo
coVlvIrkalYeVnYrYu
coVlvIrkalYeVnYrYum
coVlvIrkalYo
coVlvIro
coVlvom
coVlvomA
coVlvomammA
coVlvomAnYAl
coVlvomAnYAlpAr
coVlvomappA
coVlvomatA
coVlvomatI
coVlvomayyA
coVlvome
coVlvomeVnYa
coVlvomeVnYakUta
coVlvomeVnYamattum
coVlvomeVnYappatuvawA
coVlvomeVnYappatuvawAvawu
coVlvomeVnYappatuvawe
coVlvomeVnYappatuvawo
coVlvomeVnYappatuvawu
coVlvomeVnYappatuvawukUta
coVlvomeVnYappatuvawum
coVlvomeVnYappatuvawumattum

coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+kUta]cl.incl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+mattum]cl.rest
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+v]fut+IrkalY]2p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+Avawu]cl.min
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+e]cl.emph1
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+o]cl.intr1
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+e]cl.emph1
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+o]cl.intr1
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+v]fut+IrkalY]2p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYa]pl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYu]pl2+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYAl]pl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYa]pl2+A]cl.intr2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYa]pl2+e]cl.emph1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYa]pl2+o]cl.intr1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYa]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYu]pl2+e]cl.emph1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYu]pl2+o]cl.intr1
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYu]pl2
coVl]rt+v]fut+IrkalY]2p/h+eVnYrYu]pl2+um]cl.incl1
coVl]rt+v]fut+IrkalY]2p/h+o]cl.intr1
coVl]rt+v]fut+Ir]2shl/p+o]cl.intr1
coVl]rt+v]fut]+om]1pl
coVl]rt+v]fut]+om]1pl+A]cl.intr2
coVl]rt+v]fut]+om]1pl+ammA]voc.f
coVl]rt+v]fut]+om]1pl+AnYAl]adm
coVl]rt+v]fut]+om]1pl+AnYAl]adm+pAr]aux
coVl]rt+v]fut]+om]1pl+appA]voc.m
coVl]rt+v]fut]+om]1pl+atA]voc.m
coVl]rt+v]fut]+om]1pl+atI]voc.f
coVl]rt+v]fut]+om]1pl+ayyA]voc.mh
coVl]rt+v]fut]+om]1pl+e]cl.emph1
coVl]rt+v]fut]+om]1pl+eVnYa]pl2
coVl]rt+v]fut]+om]1pl+eVnYa]pl2+kUta]cl.incl2
coVl]rt+v]fut]+om]1pl+eVnYa]pl2+mattum]cl.rest
coVl]rt+v]fut]torn]1pl+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+mattum]cl.rest

coVlvomeVnYappatuvawuwAnY coVl]rt+v]fut]+om]1pl+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVlvomeVnYavA coVl]rt+v]fut]+om]1pl+eVnYa]pl2+A]cl.intr2
coVlvomeVnYavAvawu coVl]rt+v]fut]+om]1pl+eVnYa]pl2+Avawu]cl.min
coVlvomeVnYave coVl]rt+v]fut]+om]1pl+eVnYa]pl2+e]cl.emph1
coVlvomeVnYavo coVl]rt+v]fut]+om]1pl+eVnYa]pl2+o]cl.intr1
coVlvomeVnYavum coVl]rt+v]fut]+om]1pl+eVnYa]pl2+um]cl.incl1
coVlvomeVnYawAnY coVl]rt+v]fut]+om]1pl+eVnYa]pl2+wAnY]cl.emph2
coVlvomeVnYpawA coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+A]cl.intr2
coVlvomeVnYpawAvawu coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+Avawu]cl.min
coVlvomeVnYpawe coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+e]cl.emph1
coVlvomeVnYpawo coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+o]cl.intr1
coVlvomeVnYpawu coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2
coVlvomeVnYpawukUta coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+kUta]cl.incl2
coVlvomeVnYpawum coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+um]cl.incl1
coVlvomeVnYpawumattum coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+mattum]cl.rest
coVlvomeVnYpawuwAnY coVl]rt+v]fut]+om]1pl+eVnYpawu]pl2+wAnY]cl.emph2
coVlvomeVnYrYa coVl]rt+v]fut]+om]1pl+eVnYrYa]pl2
coVlvomeVnYrYA coVl]rt+v]fut]+om]1pl+eVnYrYu]pl2+A]cl.intr2
coVlvomeVnYrYAl coVl]rt+v]fut]+om]1pl+eVnYrYAl]pl2
coVlvomeVnYrYAlA coVl]rt+v]fut]+om]1pl+eVnYrYAl]pl2+A]cl.intr2
coVlvomeVnYrYAlAvawu coVl]rt+v]fut]+om]1pl+eVnYrYAl]pl2+Avawu]cl.min
coVlvomeVnYrYAle coVl]rt+v]fut]+om]1pl+eVnYrYAl]pl2+e]cl.emph1
coVlvomeVnYrYAlo coVl]rt+v]fut]+om]1pl+eVnYrYAl]pl2+o]cl.intr1
coVlvomeVnYrYAlum coVl]rt+v]fut]+om]1pl+eVnYrYAl]pl2+um]cl.incl1
coVlvomeVnYrYavA coVl]rt+v]fut]+om]1pl+eVnYrYa]pl2+A]cl.intr2
coVlvomeVnYrYavAvawu coVl]rt+v]fut]+om]1pl+eVnYrYa]pl2+Avawu]cl.min
coVlvomeVnYrYAvawu coVl]rt+v]fut]+om]1pl+eVnYrYu]pl2+Avawu]cl.min
coVlvomeVnYrYave coVl]rt+v]fut]+om]1pl+eVnYrYa]pl2+e]cl.emph1
coVlvomeVnYrYavo coVl]rt+v]fut]+om]1pl+eVnYrYa]pl2+o]cl.intr1
coVlvomeVnYrYavum coVl]rt+v]fut]+om]1pl+eVnYrYa]pl2+um]cl.incl1
coVlvomeVnYrYe coVl]rt+v]fut]+om]1pl+eVnYrYu]pl2+e]cl.emph1
coVlvomeVnYrYo coVl]rt+v]fut]+om]1pl+eVnYrYu]pl2+o]cl.intr1
coVlvomeVnYrYu coVl]rt+v]fut]+om]1pl+eVnYrYu]pl2
coVlvomeVnYrYum coVl]rt+v]fut]+om]1pl+eVnYrYu]pl2+um]cl.incl1
coVlvomo coVl]rt+v]fut]+om]1pl+o]cl.intr1
coVlvompAr coVl]rt+v]fut]+om]1pl+pAr]aux
coVnYnYa coVl]rt+nYa]pstadjppl
coVnYnYAl coVl]rt+nY]pst+Al]poscdl
coVnYnYAlA coVl]rt+nY]pst+Al]poscdl+A]cl.intr2
coVnYnYAlammA coVl]rt+nY]pst+Al]poscdl+ammA]voc.f
coVnYnYAlappA coVl]rt+nY]pst+Al]poscdl+appA]voc.m
coVnYnYAlatA coVl]rt+nY]pst+Al]poscdl+atA]voc.m
coVnYnYAlatI coVl]rt+nY]pst+Al]poscdl+atI]voc.**f**
coVnYnYAlayyA coVl]rt+nY]pst+Al]poscdl+ayyA]voc.mh
coVnYnYAle coVl]rt+nY]pst+Al]poscdl+e]cl.emph1
coVnYnYAleVnYa coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2
coVnYnYAleVnYakUta coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+kUta]cl.incl2
coVnYnYAleVnYamattum coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+mattum]cl.rest
coVnYnYAleVnYavA coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+A]cl.intr2
coVnYnYAleVnYavAvawu coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+Avawu]cl.min
coVnYnYAleVnYave coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+e]cl.emph1
coVnYnYAleVnYavo coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+o]cl.intr1
coVnYnYAleVnYavum coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+um]cl.incl1
coVnYnYAleVnYawAnY coVl]rt+nY]pst+Al]poscdl+eVnYa]pl2+wAnY]cl.emph2
coVnYnYAleVnYpawA coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+A]cl.intr2
coVnYnYAleVnYpawAvawu coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+Avawu]cl.min
coVnYnYAleVnYpawe coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+e]cl.emph1
coVnYnYAleVnYpawo coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+o]cl.intr1
coVnYnYAleVnYpawu coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2
coVnYnYAleVnYpawukUta coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+kUta]cl.incl2
coVnYnYAleVnYpawum coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+um]cl.incl1
coVnYnYAleVnYpawumattum coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+mattum]cl.rest
coVnYnYAleVnYpawuwAnY coVl]rt+nY]pst+Al]poscdl+eVnYpawu]pl2+wAnY]cl.emph2
coVnYnYAleVnYrYa coVl]rt+nY]pst+Al]poscdl+eVnYrYa]pl2
coVnYnYAleVnYrYA coVl]rt+nY]pst+Al]poscdl+eVnYrYu]pl2+A]cl.intr2
coVnYnYAleVnYrYavA coVl]rt+nY]pst+Al]poscdl+eVnYrYa]pl2+A]cl.intr2
coVnYnYAleVnYrYavAvawu coVl]rt+nY]pst+Al]poscdl+eVnYrYa]pl2+Avawu]cl.min
coVnYnYAleVnYrYAvawu coVl]rt+nY]pst+Al]poscdl+eVnYrYu]pl2+Avawu]cl.min

coVnYnYAleVnYrYave
coVnYnYAleVnYrYavo
coVnYnYAleVnYrYavum
coVnYnYAleVnYrYe
coVnYnYAleVnYrYo
coVnYnYAleVnYrYu
coVnYnYAleVnYrYum
coVnYnYAlo
coVnYnYAlpAr
coVnYnYAlY
coVnYnYAlYA
coVnYnYAlYammA
coVnYnYAlYappA
coVnYnYAlYatA
coVnYnYAlYatI
coVnYnYAlYayyA
coVnYnYAlYe
coVnYnYAlYeVnYa
coVnYnYAlYeVnYakUta
coVnYnYAlYeVnYamattum
coVnYnYAlYeVnYappatuvawA
coVnYnYAlYeVnYappatuvawAvawu
coVnYnYAlYeVnYappatuvawe
coVnYnYAlYeVnYappatuvawo
coVnYnYAlYeVnYappatuvawu
coVnYnYAlYeVnYappatuvawukUta
coVnYnYAlYeVnYappatuvawum
coVnYnYAlYeVnYappatuvawumattum
coVnYnYAlYeVnYappatuvawuwAnY
coVnYnYAlYeVnYavA
coVnYnYAlYeVnYavAvawu
coVnYnYAlYeVnYave
coVnYnYAlYeVnYavo
coVnYnYAlYeVnYavum
coVnYnYAlYeVnYawAnY
coVnYnYAlYeVnYpawA
coVnYnYAlYeVnYpawAvawu
coVnYnYAlYeVnYpawe
coVnYnYAlYeVnYpawo
coVnYnYAlYeVnYpawu
coVnYnYAlYeVnYpawukUta
coVnYnYAlYeVnYpawum
coVnYnYAlYeVnYpawumattum
coVnYnYAlYeVnYpawuwAnY
coVnYnYAlYeVnYrYa
coVnYnYAlYeVnYrYA
coVnYnYAlYeVnYrYAl
coVnYnYAlYeVnYrYAlA
coVnYnYAlYeVnYrYAlAvawu
coVnYnYAlYeVnYrYAle
coVnYnYAlYeVnYrYAlo
coVnYnYAlYeVnYrYAlum
coVnYnYAlYeVnYrYavA
coVnYnYAlYeVnYrYavAvawu
coVnYnYAlYeVnYrYAvawu
coVnYnYAlYeVnYrYave
coVnYnYAlYeVnYrYavo
coVnYnYAlYeVnYrYavum
coVnYnYAlYeVnYrYe
coVnYnYAlYeVnYrYo
coVnYnYAlYeVnYrYu
coVnYnYAlYeVnYrYum
coVnYnYAlYo
coVnYnYAlYpAr
coVnYnYAnY
coVnYnYAnYA
coVnYnYAnYammA
coVnYnYAnYappA

coVl]rt+nY]pst+Al]poscdl+eVnYrYa]pl2+e]cl.emph1
coVl]rt+nY]pst+Al]poscdl+eVnYrYa]pl2+o]cl.intr1
coVl]rt+nY]pst+Al]poscdl+eVnYrYa]pl2+um]cl.incl1
coVl]rt+nY]pst+Al]poscdl+eVnYrYu]pl2+e]cl.emph1
coVl]rt+nY]pst+Al]poscdl+eVnYrYu]pl2+o]cl.intr1
coVl]rt+nY]pst+Al]poscdl+eVnYrYu]pl2
coVl]rt+nY]pst+Al]poscdl+eVnYrYu]pl2+um]cl.incl1
coVl]rt+nY]pst+Al]poscdl+o]cl.intr1
coVl]rt+nY]pst+Al]poscdl+pAr]aux
coVl]rt+nY]pst+AlY]3sf
coVl]rt+nY]pst+AlY]3sf+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+ammA]voc.f
coVl]rt+nY]pst+AlY]3sf+appA]voc.m
coVl]rt+nY]pst+AlY]3sf+atA]voc.m
coVl]rt+nY]pst+AlY]3sf+atI]voc.f
coVl]rt+nY]pst+AlY]3sf+ayyA]voc.mh
coVl]rt+nY]pst+AlY]3sf+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+kUta]cl.incl2
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+mattum]cl.rest
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+AlY]3sf+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+um]cl.incl1
coVl]rt+nY]pst+AlY]3sf+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+Avawu]cl.min
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+um]cl.incl1
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+AlY]3sf+eVnYapawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+AlY]3sf+eVnYrYa]pl2
coVl]rt+nY]pst+AlY]3sf+eVnYrYu]pl2+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+eVnYrYAl]pl2
coVl]rt+nY]pst+AlY]3sf+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+nY]pst+AlY]3sf+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+eVnYrYAi]pl2+um]cl.incl1
coVl]rt+nY]pst+AlY]3sf+eVnYrYa]pl2+A]cl.intr2
coVl]rt+nY]pst+AlY]3sf+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+AlY]3sf+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+nY]pst+AlY]3sf+eVnYrYa]pl2+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYrYa]pl2+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+eVnYrYa]pl2+um]cl.incl1
coVl]rt+nY]pst+AlY]3sf+eVnYrYu]pl2+e]cl.emph1
coVl]rt+nY]pst+AlY]3sf+eVnYrYu]pl2+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+eVnYrYu]pl2
coVl]rt+nY]pst+AlY]3sf+eVnYrYu]pl2+um]cl.incl1
coVl]rt+nY]pst+AlY]3sf+o]cl.intr1
coVl]rt+nY]pst+AlY]3sf+pAr]aux
coVl]rt+nY]pst+AnY]3sm
coVl]rt+nY]pst+AnY]3sm+A]cl.intr2
coVl]rt+nY]pst+AnY]3sm+ammA]voc.f
coVl]rt+nY]pst+AnY]3sm+appA]voc.m

coVnYnYAnYatA	coVl|rt+nY|pst+AnY\]3sm+atA\]voc.m
coVnYnYAnYatI	coVl|rt+nY|pst+AnY\]3sm+atI\]voc.f
coVnYnYAnYayyA	coVl|rt+nY|pst+AnY\]3sm+ayyA\]voc.mh
coVnYnYAnYe	coVl|rt+nY|pst+AnY\]3sm+e\]cl.emph1
coVnYnYAnYeVnYa	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2
coVnYnYAnYeVnYakUta	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+kUta\]cl.incl2
coVnYnYAnYeVnYamattum	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+mattum\]cl.rest
coVnYnYAnYeVnYappatuvawA	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+A\]cl.intr2
coVnYnYAnYeVnYappatuvawAvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+Avawu\]cl.min
coVnYnYAnYeVnYappatuvawe	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+e\]cl.emph1
coVnYnYAnYeVnYappatuvawo	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+o\]cl.intr1
coVnYnYAnYeVnYappatuvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2
coVnYnYAnYeVnYappatuvawukUta	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+kUta\]cl.incl2
coVnYnYAnYeVnYappatuvawum	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+um\]cl.incl1
coVnYnYAnYeVnYappatuvawumattum	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+mattum\]cl.rest
coVnYnYAnYeVnYappatuvawuwAnY	coVl|rt+nY|pst+AnY\]3sm+eVnYappatuvawu\]pl2+wAnY\]cl.emph2
coVnYnYAnYeVnYavA	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+A\]cl.intr2
coVnYnYAnYeVnYavAvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+Avawu\]cl.min
coVnYnYAnYeVnYave	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+e\]cl.emph1
coVnYnYAnYeVnYavo	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+o\]cl.intr1
coVnYnYAnYeVnYavum	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+um\]cl.incl1
coVnYnYAnYeVnYawAnY	coVl|rt+nY|pst+AnY\]3sm+eVnYa\]pl2+wAnY\]cl.emph2
coVnYnYAnYeVnYpawA	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+A\]cl.intr2
coVnYnYAnYeVnYpawAvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+Avawu\]cl.min
coVnYnYAnYeVnYpawe	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+e\]cl.emph1
coVnYnYAnYeVnYpawo	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+o\]cl.intr1
coVnYnYAnYeVnYpawu	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2
coVnYnYAnYeVnYpawukUta	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+kUta\]cl.incl2
coVnYnYAnYeVnYpawum	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+um\]cl.incl1
coVnYnYAnYeVnYpawumattum	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+mattum\]cl.rest
coVnYnYAnYeVnYpawuwAnY	coVl|rt+nY|pst+AnY\]3sm+eVnYpawu\]pl2+wAnY\]cl.emph2
coVnYnYAnYeVnYrYa	coVl|rt+nY|pst+AnY\]3sm+eVnYrYa\]pl2
coVnYnYAnYeVnYrYA	coVl|rt+nY|pst+AnY\]3sm+eVnYrYu\]pl2+A\]cl.intr2
coVnYnYAnYeVnYrYAl	coVl|rt+nY|pst+AnY\]3sm+eVnYrYAl\]pl2
coVnYnYAnYeVnYrYAlA	coVl|rt+nY|pst+AnY\]3sm+eVnYrYAl\]pl2+A\]cl.intr2
coVnYnYAnYeVnYrYAlAvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYrYAl\]pl2+Avawu\]cl.min
coVnYnYAnYeVnYrYAle	coVl|rt+nY|pst+AnY\]3sm+eVnYrYAl\]pl2+e\]cl.emph1
coVnYnYAnYeVnYrYAlo	coVl|rt+nY|pst+AnY\]3sm+eVnYrYAl\]pl2+o\]cl.intr1
coVnYnYAnYeVnYrYAlum	coVl|rt+nY|pst+AnY\]3sm+eVnYrYAl\]pl2+um\]cl.incl1
coVnYnYAnYeVnYrYavA	coVl|rt+nY|pst+AnY\]3sm+eVnYrYa\]pl2+A\]cl.intr2
coVnYnYAnYeVnYrYavAvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYrYa\]pl2+Avawu\]cl.min
coVnYnYAnYeVnYrYAvawu	coVl|rt+nY|pst+AnY\]3sm+eVnYrYu\]pl2+Avawu\]cl.min
coVnYnYAnYeVnYrYave	coVl|rt+nY|pst+AnY\]3sm+eVnYrYa\]pl2+e\]cl.emph1
coVnYnYAnYeVnYrYavo	coVl|rt+nY|pst+AnY\]3sm+eVnYrYa\]pl2+o\]cl.intr1
coVnYnYAnYeVnYrYavum	coVl|rt+nY|pst+AnY\]3sm+eVnYrYa\]pl2+um\]cl.incl1
coVnYnYAnYeVnYrYe	coVl|rt+nY|pst+AnY\]3sm+eVnYrYu\]pl2+e\]cl.emph1
coVnYnYAnYeVnYrYo	coVl|rt+nY|pst+AnY\]3sm+eVnYrYu\]pl2+o\]cl.intr1
coVnYnYAnYeVnYrYu	coVl|rt+nY|pst+AnY\]3sm+eVnYrYu\]pl2
coVnYnYAnYeVnYrYum	coVl|rt+nY|pst+AnY\]3sm+eVnYrYu\]pl2+um\]cl.incl1
coVnYnYAnYo	coVl|rt+nY|pst+AnY\]3sm+o\]cl.intr1
coVnYnYAnYpAr	coVl|rt+nY|pst+AnY\]3sm+pAr\]aux
coVnYnYApirYakA	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+A\]cl.intr2
coVnYnYApirYakAvawu	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+Avawu\]cl.min
coVnYnYApirYake	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+e\]cl.emph1
coVnYnYApirYako	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+o\]cl.intr1
coVnYnYApirYaku	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv
coVnYnYApirYakukUta	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+kUta\]cl.incl2
coVnYnYApirYakukUta	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+kUta\]cl.incl2
coVnYnYApirYakum	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+um\]cl.incl1
coVnYnYApirYakumattum	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+mattum\]cl.rest
coVnYnYApirYakuwAnY	coVl|rt+nYa\]pstadjppl+pirYaku\]datadv+wAnY\]cl.emph2
coVnYnYAr	coVl|rt+nY|pst+Ar
coVnYnYArA	coVl|rt+nY|pst+Ar\]3sh+A\]cl.intr2
coVnYnYArammA	coVl|rt+nY|pst+Ar\]3sh+ammA\]voc.f
coVnYnYArappA	coVl|rt+nY|pst+Ar\]3sh+appA\]voc.m
coVnYnYAratA	coVl|rt+nY|pst+Ar\]3sh+atA\]voc.m
coVnYnYAratI	coVl|rt+nY|pst+Ar\]3sh+atI\]voc.f
coVnYnYArayyA	coVl|rt+nY|pst+Ar\]3sh+ayyA\]voc.mh

coVnYnYAre	coVl]rt+nY]pst+Ar]3sh+e]cl.emph1
coVnYnYArcVnYa	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2
coVnYnYAreVnYakUta	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+kUta]cl.incl2
coVnYnYAreVnYamattum	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+mattum]cl.rest
coVnYnYAreVnYappatuvawA	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+A]cl.intr2
coVnYnYAreVnYappatuvawAvawu	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+Avawu]cl.min
coVnYnYAreVnYappatuvawe	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+e]cl.emph1
coVnYnYAreVnYappatuvawo	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+o]cl.intr1
coVnYnYAreVnYappatuvawu	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2
coVnYnYAreVnYappatuvawukUta	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+kUta]cl.incl2
coVnYnYAreVnYappatuvawum	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+um]cl.incl1
coVnYnYAreVnYappatuvawumattum	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+mattum]cl.rest
coVnYnYAreVnYappatuvawuwAnY	coVl]rt+nY]pst+Ar]3sh+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVnYnYAreVnYavA	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+A]cl.intr2
coVnYnYAreVnYavAvawu -	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+Avawu]cl.min
coVnYnYAreVnYave	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+e]cl.emph1
coVnYnYAreVnYavo	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+o]cl.intr1
coVnYnYAreVnYavum	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+um]cl.incl1
coVnYnYAreVnYawAnY	coVl]rt+nY]pst+Ar]3sh+eVnYa]pl2+wAnY]cl.emph2
coVnYnYAreVnYpawA	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+A]cl.intr2
coVnYnYAreVnYpawAvawu	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+Avawu]cl.min
coVnYnYAreVnYpawe	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+e]cl.emph1
coVnYnYAreVnYpawo	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+o]cl.intr1
coVnYnYAreVnYpawu	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2
coVnYnYAreVnYpawukUta	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+kUta]cl.incl2
coVnYnYAreVnYpawum	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+um]cl.incl1
coVnYnYAreVnYpawumattum	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+mattum]cl.rest
coVnYnYAreVnYpawuwAnY	coVl]rt+nY]pst+Ar]3sh+eVnYpawu]pl2+wAnY]cl.emph2
coVnYnYAreVnYrYa	coVl]rt+nY]pst+Ar]3sh+eVnYrYa]pl2
coVnYnYAreVnYrYA	coVl]rt+nY]pst+Ar]3sh+eVnYrYu]pl2+A]cl.intr2
coVnYnYAreVnYrYAl	coVl]rt+nY]pst+Ar]3sh+eVnYrYAl]pl2
coVnYnYAreVnYrYAlA	coVl]rt+nY]pst+Ar]3sh+eVnYrYAl]pl2+A]cl.intr2
coVnYnYAreVnYrYAlAvawu	coVl]rt+nY]pst+Ar]3sh+eVnYrYAl]pl2+Avawu]cl.min
coVnYnYAreVnYrYAle	coVl]rt+nY]pst+Ar]3sh+eVnYrYAl]pl2+e]cl.emph1
coVnYnYArcVnYrYAlo	coVl]rt+nY]pst+Ar]3sh+eVnYrYAl]pl2+o]cl.intr1
coVnYnYAreVnYrYAlum	coVl]rt+nY]pst+Ar]3sh+eVnYrYAl]pl2+um]cl.incl1
coVnYnYAreVnYrYavA	coVl]rt+nY]pst+Ar]3sh+eVnYrYa]pl2+A]cl.intr2
coVnYnYAreVnYrYavAvawu	coVl]rt+nY]pst+Ar]3sh+eVnYrYa]pl2+Avawu]cl.min
coVnYnYAreVnYrYAvawu	coVl]rt+nY]pst+Ar]3sh+eVnYrYu]pl2+Avawu]cl.min
coVnYnYAreVnYrYave	coVl]rt+nY]pst+Ar]3sh+eVnYrYa]pl2+e]cl.emph1
coVnYnYAreVnYrYavo	coVl]rt+nY]pst+Ar]3sh+eVnYrYa]pl2+o]cl.intr1
coVnYnYAreVnYrYavum	coVl]rt+nY]pst+Ar]3sh+eVnYrYa]pl2+um]cl.incl1
coVnYnYAreVnYrYe	coVl]rt+nY]pst+Ar]3sh+eVnYrYu]pl2+e]cl.emph1
coVnYnYAreVnYrYo	coVl]rt+nY]pst+Ar]3sh+eVnYrYu]pl2+o]cl.intr1
coVnYnYAreVnYrYu	coVl]rt+nY]pst+Ar]3sh+eVnYrYu]pl2
coVnYnYAreVnYrYum	coVl]rt+nY]pst+Ar]3sh+eVnYrYu]pl2+um]cl.incl1
coVnYnYArkalY	coVl]rt+nY]pst+ArkalY]3p/h
coVnYnYArkalYA	coVl]rt+nY]pst+ArkalY]3p/h+A]cl.intr2
coVnYnYArkalYammA	coVl]rt+nY]pst+ArkalY]3p/h+ammA]voc.f
coVnYnYArkalYappA	coVl]rt+nY]pst+ArkalY]3p/h+appA]voc.m
coVnYnYArkalYatA	coVl]rt+nY]pst+ArkalY]3p/h+atA]voc.m
coVnYnYArkalYatI	coVl]rt+nY]pst+ArkalY]3p/h+atI]voc.f
coVnYnYArkalYayyA	coVl]rt+nY]pst+ArkalY]3p/h+ayyA]voc.mh
coVnYnYArkalYe	coVl]rt+nY]pst+ArkalY]3p/h+e]cl.emph1
coVnYnYArkalYeVnYa	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2
coVnYnYArkalYeVnYakUta	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+kUta]cl.incl2
coVnYnYArkalYeVnYamattum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+mattum]cl.rest
coVnYnYArkalYeVnYappatuvawA	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVnYnYArkalYeVnYappatuvawAvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVnYnYArkalYeVnYappatuvawe	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVnYnYArkalYeVnYappatuvawo	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVnYnYArkalYeVnYappatuvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2
coVnYnYArkalYeVnYappatuvawukUta	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVnYnYArkalYeVnYappatuvawum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVnYnYArkalYeVnYappatuvawumattum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVnYnYArkalYeVnYappatuvawuwAnY	coVl]rt+nY]pst+ArkalY]3p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVnYnYArkalYeVnYavA	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+A]cl.intr2
coVnYnYArkalYeVnYavAvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+Avawu]cl.min

coVnYnYArkalYeVnYave	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+e]cl.emph1
coVnYnYArkalYeVnYavo	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+o]cl.intr1
coVnYnYArkalYeVnYavum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+um]cl.incl1
coVnYnYArkalYeVnYawAnY	coVl]rt+nY]pst+ArkalY]3p/h+eVnYa]pl2+wAnY]cl.emph2
coVnYnYArkalYeVnYpawA	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+A]cl.intr2
coVnYnYArkalYeVnYpawAvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+Avawu]cl.min
coVnYnYArkalYeVnYpawe	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+e]cl.emph1
coVnYnYArkalYeVnYpawo	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+o]cl.intr1
coVnYnYArkalYeVnYpawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2
coVnYnYArkalYeVnYpawukUta	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+kUta]cl.incl2
coVnYnYArkalYeVnYpawum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+um]cl.incl1
coVnYnYArkalYeVnYpawumattum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+mattum]cl.rest
coVnYnYArkalYeVnYpawuwAnY	coVl]rt+nY]pst+ArkalY]3p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVnYnYArkalYeVnYrYa	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYa]pl2
coVnYnYArkalYeVnYrYA	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYu]pl2+A]cl.intr2
coVnYnYArkalYeVnYrYAl	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYAl]pl2
coVnYnYArkalYeVnYrYAlA	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYAl]pl2+A]cl.intr2
coVnYnYArkalYeVnYrYAlAvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYAl]pl2+Avawu]cl.min
coVnYnYArkalYeVnYrYAle	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYAl]pl2+e]cl.emph1
coVnYnYArkalYeVnYrYAlo	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYAl]pl2+o]cl.intr1
coVnYnYArkalYeVnYrYAlum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYAl]pl2+um]cl.incl1
coVnYnYArkalYeVnYrYavA	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYa]pl2+A]cl.intr2
coVnYnYArkalYeVnYrYavAvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYa]pl2+Avawu]cl.min
coVnYnYArkalYeVnYrYAvawu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYu]pl2+Avawu]cl.min
coVnYnYArkalYeVnYrYave	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYa]pl2+e]cl.emph1
coVnYnYArkalYeVnYrYavo	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYa]pl2+o]cl.intr1
coVnYnYArkalYeVnYrYavum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYa]pl2+um]cl.incl1
coVnYnYArkalYeVnYrYe	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYu]pl2+e]cl.emph1
coVnYnYArkalYeVnYrYo	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYu]pl2+o]cl.intr1
coVnYnYArkalYeVnYrYu	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYu]pl2
coVnYnYArkalYeVnYrYum	coVl]rt+nY]pst+ArkalY]3p/h+eVnYrYu]pl2+um]cl.incl1
coVnYnYArkalYo	coVl]rt+nY]pst+ArkalY]3p/h+o]cl.intr1
coVnYnYAro	coVl]rt+nY]pst+Ar]3sh+o]cl.intr1
coVnYnYawanYAl	coVl]rt+nY]pst+awanYAl]adv
coVnYnYArkalYpAr	coVl]rt+nY]pst+ArkalY]3p/h+pAr]aux
coVnYnYArpAr	coVl]rt+nY]pst+Ar]3sh+pAr]aux
coVnYnYawanYAlA	coVl]rt+nY]pst+awanYAl]adv+A]cl.intr2
coVnYnYawanYAlAvawu	coVl]rt+nY]pst+awanYAl]adv+Avawu]cl.min
coVnYnYawanYAle	coVl]rt+nY]pst+awanYAl]adv+e]cl.emph1
coVnYnYawanYAlkUta	coVl]rt+nY]pst+awanYAl]adv+kUta]cl.incl2
coVnYnYawanYAlmattum	coVl]rt+nY]pst+awanYAl]adv+mattum]cl.rest
coVnYnYawanYAlo	coVl]rt+nY]pst+awanYAl]adv+o]cl.intr1
coVnYnYawanYAlum	coVl]rt+nY]pst+awanYAl]adv+um]cl.incl1
coVnYnYawanYAlwAnY	coVl]rt+nY]pst+awanYAl]adv+wAnY]cl.emph2
coVnYnYawarYkappuram	coVl]rt+nY]pst+awarYku]dat+appuram]adv
coVnYnYawarYkappuramA	coVl]rt+nY]pst+awarYku]dat+appuram]adv+A]cl.intr2
coVnYnYawarYkappuramAvawu	coVl]rt+nY]pst+awarYku]dat+appuram]adv+Avawu]cl.min
coVnYnYawarYkappurame	coVl]rt+nY]pst+awarYku]dat+appuram]adv+e]cl.emph1
coVnYnYawarYkappuramkUta	coVl]rt+nY]pst+awarYku]dat+appuram]adv+kUta]cl.incl2
coVnYnYawarYkappurammattum	coVl]rt+nY]pst+awarYku]dat+appuram]adv+mattum]cl.rest
coVnYnYawarYkappuramo	coVl]rt+nY]pst+awarYku]dat+appuram]adv+o]cl.intr1
coVnYnYawarYkappuramum	coVl]rt+nY]pst+awarYku]dat+appuram]adv+um]cl.incl1
coVnYnYawarYkappuramwAnY	coVl]rt+nY]pst+awarYku]dat+appuram]adv+wAnY]cl.emph2
coVnYnYawarYkumunY	coVl]rt+nY]pst+awarYku]dat+munY]adv
coVnYnYawarYkumunYnYA	coVl]rt+nY]pst+awarYku]dat+munY]adv]+A]cl.intr2
coVnYnYawarYkumunYnYAvawu	coVl]rt+nY]pst+awarYku]dat+munY]adv]+Avawu]cl.min
coVnYnYawarYkumunYnYe	coVl]rt+nY]pst+awarYku]dat+munY]adv]+e]cl.emph1
coVnYnYawarYkumunYkUta	coVl]rt+nY]pst+awarYku]dat+munY]adv]+kUta]cl.incl2
coVnYnYawarYkumunYmattum	coVl]rt+nY]pst+awarYku]dat+munY]adv]+mattum]cl.rest
coVnYnYawarYkumunYnYA	coVl]rt+nY]pst+awarYku]dat+munY]adv]+A]cl.intr2
coVnYnYawarYkumunYnYAl	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv
coVnYnYawarYkumunYnYAlA	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+A]cl.intr2
coVnYnYawarYkumunYnYAlAvawu	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+Avawu]cl.min
coVnYnYawarYkumunYnYAle	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+e]cl.emph1
coVnYnYawarYkumunYnYAlkUta	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+kUta]cl.incl2
coVnYnYawarYkumunYnYAlmattum	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+mattum]cl.rest
coVnYnYawarYkumunYnYAlo	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+o]cl.intr1
coVnYnYawarYkumunYnYAlum	coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+um]cl.incl1

coVnYnYawarYkumunYnYAlwAnY
coVnYnYawarYkumunYnYAvawu
coVnYnYawarYkumunYnYe
coVnYnYawarYkumunYnYo
coVnYnYawarYkumunYnYum
CoVnYnYawarYkumunYnYo
coVnYnYawarYkumunYpA
coVnYnYawarYkumunYpAvawu
coVnYnYawarYkumunYpe
coVnYnYawarYkumunYpo
coVnYnYawarYkumunYpu
coVnYnYawarYkumunYpukUta
coVnYnYawarYkumunYpukUta
coVnYnYawarYkumunYpum
coVnYnYawarYkumunYpumattum
coVnYnYawarYkumunYpuwAnY
CoVnYnYawarYkumunYnYum
coVnYnYawarYkumunYwAnY
coVnYnYawarYkuppinY
coVnYnYawarYkuppinYnYA
coVnYnYawarYkuppinYnYAvawu
coVnYnYawarYkuppinYnYe
coVnYnYawarYkuppinYkUta
coVnYnYawarYkuppinYmattum
CoVnYnYawarYkuppinYnYA
CoVnYnYawarYkuppinYnYA!
coVnYnYawarYkuppinYnYAlA
coVnYnYawarYkuppinYnYAlAvawu
coVnYnYawarYkuppinYnYAle
coVnYnYawarYkuppinYnYAlkUta
coVnYnYawarYkuppinYnYAlmattum
coVnYnYawarYkuppinYnYAlo
coVnYnYawarYkuppinYnYAlum
coVnYnYawarYkuppinYnYAlwAnY
CoVnYnYawarYkuppinYnYAvawu
coVnYnYawarYkuppinYnYe
coVnYnYawarYkuppinYnYo
coVnYnYawarYkuppinYnYum
CoVnYnYawarYkuppinYnYo
coVnYnYawarYkuppinYpA
coVnYnYawarYkuppinYpAvawu
coVnYnYawarYkuppinYpe
coVnYnYawarYkuppinYpo
coVnYnYawarYkuppinYpu
coVnYnYawarYkuppinYpukUta
coVnYnYawarYkuppinYpukUta
coVnYnYawarYkuppinYpum
coVnYnYawarYkuppinYpumattum
coVnYnYawarYkuppinYpuwAnY
coVnYnYawarYkuppinYnYum
coVnYnYawarYkuppinYwAnY
coVnYnYAy
coVnYnYAyA
coVnYnYAyammA
coVnYnYAyappA
coVnYnYAyatA
coVnYnYAyatI
coVnYnYAyayyA
coVnYnYAye
coVnYnYAyeVnYa
coVnYnYAyeVnYakUta
coVnYnYAyeVnYamattum
coVnYnYAyeVnYappatuvawA
coVnYnYAycVnYappatuvawAvawu
coVnYnYAyeVnYappatuvawe
coVnYnYAyeVnYappatuvawo
coVnYnYAyeVnYappatuvawu
coVnYnYAyeVnYappatuvawukUta

coVl]rt+nY]pst+awarYku]dat+munYnYAl]adv+wAnY]cl.emph2
coVl]rt+nY]pst+awarYku]dat+munY]adv]+Avawu]cl.min
coVl]rt+nY]pst+awarYku]dat+munY]adv]+e]cl.emph1
coVl]rt+nY]pst+awarYku]dat+munY]adv]+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+munY]adv]+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+munY]adv]+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+A]cl.intr2
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+Avawu]cl.min
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+e]cl.emph1
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+munYpu]adv
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+kUta]cl.incl2
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+kUta]cl.incl2
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+mattum]cl.rest
coVl]rt+nY]pst+awarYku]dat+munYpu]adv+wAnY]cl.emph2
coVl]rt+nY]pst+awarYku]dat+munY]adv]+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+munY]adv]+wAnY]cl.emph2
coVl]rt+nY]pst+ awarYku]dat+ pinY] adv
coVl]rt+nY]pst+awarYku]dat+pinY]adv+A]cl.intr2
coVl]rt+nY]pst+awarYku]dat+pinY]adv+Avawu]cl.min
coVl]rt+nY]pst+awarYku]dat+pinY]adv+e]cl.emph1
coVl]rt+nY]pst+awarYku]dat+pinY]adv+kUta]cl.incl2
coVl]rt+nY]pst+awarYku]dat+pinY]adv+mattum]cl.rest
coVl]rt+nY]pst+awarYku]dat+pinY]adv+A]cl.intr2
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+A]cl.intr2
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+Avawu]cl.min
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+e]cl.emph1
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+kUta]cl.incl2
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+mattum]cl.rest
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+pinYnYAl]adv+wAnY]cl.emph2
coVl]rt+nY]pst+awarYku]dat+pinY]adv+Avawu]cl.min
coVl]rt+nY]pst+awarYku]dat+pinY]adv+e]cl.emph1
coVl]rt+nY]pst+awarYku]dat+pinY]adv+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+pinY]adv+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+pinY]adv+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+A]cl.intr2
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+Avawu]cl.min
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+e]cl.emph1
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+o]cl.intr1
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+kUta]cl.incl2
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+kUta]cl.incl2
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+mattum]cl.rest
coVl]rt+nY]pst+awarYku]dat+pinYpu]adv+wAnY]cl.emph2
coVl]rt+nY]pst+awarYku]dat+pinY]adv+um]cl.incl1
coVl]rt+nY]pst+awarYku]dat+pinY]adv+wAnY]cl.emph2
coVl]rt+nY]pst+Ay
coVl]rt+nY]pst+Ay]2sm/fA]cl.intr2
coVl]rt+nY]pst+Ay]2sm/fammA]voc.f
coVl]rt+nY]pst+Ay]2sm/fappA]voc.m
coVl]rt+nY]pst+Ay]2sm/fatA]voc.m
coVl]rt+nY]pst+Ay]2sm/fatI]voc.f
coVl]rt+nY]pst+Ay]2sm/fayyA]voc.mh
coVl]rt+nY]pst+Ay]2sm/fe]cl.emph1
coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2
coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+kUta]cl.incl2
coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+mattum]cl.rest
coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+nY]pst+Ay]2sm/f+cVnYappatuvawu]pl2+Avawu]d.min
coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2
coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+kUta]cl.incl2

coVnYnYAyeVnYappatuvawum	coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+um]cl.incl1
coVnYnYAyeVnYappatuvawumattum	coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+mattum]cl.rest
coVnYnYAyeVnYappatuvawuwAnY	coVl]rt+nY]pst+Ay]2sm/f+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVnYnYAyeVnYavA	coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+A]cl.intr2
coVnYnYAyeVnYavAvawu	coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+Avawu]cl.min
coVnYnYAyeVnYave	coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+e]cl.emph1
coVnYnYAyeVnYavo	coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+o]cl.intr1
coVnYnYAyeVnYavum	coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+um]cl.incl1
coVnYnYAyeVnYawAnY	coVl]rt+nY]pst+Ay]2sm/f+eVnYa]pl2+wAnY]cl.emph2
coVnYnYAyeVnYpawA	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+A]cl.intr2
coVnYnYAyeVnYpawAvawu	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+Avawu]cl.min
coVnYnYAyeVnYpawe	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+e]cl.emph1
coVnYnYAyeVnYpawo	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+o]cl.intr1
coVnYnYAyeVnYpawu	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2
coVnYnYAyeVnYpawukUta	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+kUta]cl.incl2
coVnYnYAyeVnYpawum	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+um]cl.incl1
coVnYnYAyeVnYpawumattum	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+mattum]cl.rest
coVnYnYAyeVnYpawuwAnY	coVl]rt+nY]pst+Ay]2sm/f+eVnYpawu]pl2+wAnY]cl.emph2
coVnYnYAyeVnYrYa	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYa]pl2
coVnYnYAyeVnYrYA	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYu]pl2+A]cl.intr2
coVnYnYAyeVnYrYAl	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYAl]pl2
coVnYnYAyeVnYrYAlA	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYAl]pl2+A]cl.intr2
coVnYnYAyeVnYrYAlAvawu	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYAl]pl2+Avawu]cl.min
coVnYnYAyeVnYrYAle	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYAl]pl2+e]cl.emph1
coVnYnYAyeVnYrYAlo	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYAl]pl2+o]cl.intr1
coVnYnYAyeVnYrYAlum	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYAl]pl2+um]cl.incl1
coVnYnYAyeVnYrYavA	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYa]pl2+A]cl.intr2
coVnYnYAyeVnYrYavAvawu	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYa]pl2+Avawu]cl.min
coVnYnYAyeVnYrYAvawu	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYu]pl2+Avawu]cl.min
coVnYnYAyeVnYrYave	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYa]pl2+e]cl.emph1
coVnYnYAyeVnYrYavo	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYa]pl2+o]cl.intr1
coVnYnYAyeVnYrYavum	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYa]pl2+um]cl.incl1
coVnYnYAyeVnYrYe	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYu]pl2+e]cl.emph1
coVnYnYAycVnYrYo	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYu]pl2+o]cl.intr1
coVnYnYAyeVnYrYu	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYu]pl2
coVnYnYAyeVnYrYum	coVl]rt+nY]pst+Ay]2sm/f+eVnYrYu]pl2+um]cl.incl1
coVnYnYAyo	coVl]rt+nY]pst+Ay]2sm/fo]cl.intr1
coVnYnYAypAr	coVl]rt+nY]pst+Ay]2sm/f+pAr]aux
coVnYnYclY	coVl]rt+nY]pst+clY]2sh.br
coVnYnYclYA	coVl]rt+nY]pst+clY]2sh.br+A]cl.intr2
coVnYnYclYammA	coVl]rt+nY]pst+clY]2sh.br+ammA]voc.f
coVnYnYclYappA	coVl]rt+nY]pst+clY]2sh.br+appA]voc.m
coVnYnYclYatA	coVl]rt+nY]pst+clY]2sh.br+atA]voc.m
coVnYnYclYatl	coVl]rt+nY]pst+clY]2sh.br+atl]voc.f
coVnYnYclYayyA	coVl]rt+nY]pst+clY]2sh.br+ayyA]voc.mh
coVnYnYclYe	coVl]rt+nY]pst+clY]2sh.br+e]cl.emph1
coVnYnYclYeVnYa	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2
coVnYnYclYeVnYakUta	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+kUta]cl.incl2
coVnYnYclYeVnYamattum	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+mattum]cl.rest
coVnYnYclYeVnYappatuvawA	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+A]cl.intr2
coVnYnYclYeVnYappatuvawAvawu	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+Avawu]cl.min
coVnYnYclYeVnYappatuvawe	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+e]cl.emph1
coVnYnYclYeVnYappatuvawo	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+o]cl.intr1
coVnYnYclYeVnYappatuvawu	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2
coVnYnYclYeVnYappatuvawukUta	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+kUta]cl.incl2
coVnYnYclYeVnYappatuvawum	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+um]cl.incl1
coVnYnYclYeVnYappatuvawumattum	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+mattum]cl.rest
coVnYnYclYeVnYappatuvawuwAnY	coVl]rt+nY]pst+clY]2sh.br+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVnYnYclYeVnYavA	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+A]cl.intr2
coVnYnYclYeVnYavAvawu	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+Avawu]cl.min
coVnYnYclYeVnYave	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+e]cl.emph1
coVnYnYclYeVnYavo	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+o]cl.intr1
coVnYnYclYeVnYavum	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+um]cl.incl1
coVnYnYclYeVnYawAnY	coVl]rt+nY]pst+clY]2sh.br+eVnYa]pl2+wAnY]cl.emph2
coVnYnYclYeVnYpawA	coVl]rt+nY]pst+clY]2sh.br+eVnYpawu]pl2+A]cl.intr2
coVnYnYclYeVnYpawAvawu	coVl]rt+nY]pst+clY]2sh.br+eVnYpawu]pl2+Avawu]cl.min
coVnYnYclYeVnYpawe	coVl]rt+nY]pst+clY]2sh.br+eVnYpawu]pl2+e]cl.emph1
coVnYnYclYeVnYpawo	coVl]rt+nY]pst+clY]2sh.br+eVnYpawu]pl2+o]cl.intr1

coVnYnYelYeVnYpawu
coVnYnYdYcVnYpawukUta
coVnYnYelYeVnYpawum
coVnYnYelYeVnYpawumattum
coVnYnYelYeVnYpawuwAnY
coVnYnYelYeVnYrYa
coVnYnYerYcVnYrYA
coVnYnYelYeVnYrYAl
coVnYnYelYeVnYrYAlA
coVnYnYelYeVnYrYAlAvawu
coVnYnYelYeVnYrYAle
coVnYnYelYeVnYrYAlo
coVnYnYelYeVnYrYAlum
coVnYnYelYeVnYrYavA
coVnYnYelYcVnYrYavAvawu
coVnYnYelYeVnYrYAvawu
coVnYnYelYeVnYrYave
coVnYnYelYeVnYrYavo
coVnYnYelYeVnYrYavum
coVnYnYelYeVnYrYe
coVnYnYelYeVnYrYo
coVnYnYdYcVnYrYu
coVnYnYelYeVnYrYum
coVnYnYelYo
coVnYnYenY
coVnYnYenYA
coVnYnYenYammA
coVnYnYenYappA
coVnYnYenYatA
coVnYnYenYatI
coVnYnYenYayyA
coVnYnYenYe
coVnYnYenYeVnYakUta
coVnYnYenYeVnYamattum
coVnYnYenYeVnYappatuvawA
coVnYnYenYeVnYappatuvawAvawu
coVnYnYenYeVnYappatuvawe
coVnYnYenYeVnYappatuvawo
coVnYnYenYeVnYappatuvawu
coVnYnYenYeVnYappatuvawukUta
coVnYnYenYeVnYappatuvawum
coVnYnYenYeVnYappatuvawumattum
coVnYnYenYeVnYappatuvawuwAnY
coVnYnYenYeVnYavA
coVnYnYenYeVnYavAvawu
coVnYnYenYeVnYave
coVnYnYenYeVnYavo
coVnYnYenYeVnYavum
coVnYnYenYeVnYawAnY
coVnYnYenYeVnYpawA
coVnYnYenYeVnYpawAvawu
coVnYnYenYeVnYpawe
coVnYnYenYeVnYpawo
coVnYnYenYeVnYpawu
coVnYnYenYeVnYpawukUta
coVnYnYenYeVnYpawum
coVnYnYenYeVnYpawumattum
coVnYnYenYeVnYpawuwAnY
coVnYnYenYeVnYrYa
coVnYnYenYeVnYrYA
coVnYnYenYeVnYrYAl
coVnYnYenYeVnYrYAlA
coVnYnYenYeVnYrYAlAvawu
coVnYnYenYeVnYrYAle
coVnYnYenYeVnYrYAlo
coVnYnYenYeVnYrYAlum
coVnYnYenYeVnYrYavA

coVl]rt+nY]pst+elY]2sh.br+eVnYpawu]pl2
coVl]rt+nY]pst+elY]2sh.br+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+elY]2sh.br+eVnYpawu]pl2+um]cl.incl1
coVl]rt+nY]pst+elY]2sh.br+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+elY]2sh.br+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYa]pl2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYu]pl2+A]cl.intr2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYAl]pl2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+nY]pst+elY]2sh.br+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYa]pl2+A]cl.intr2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+elY]2sh.br+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+nY]pst+elY]2sh.br+eVnYrYa]pl2+e]cl.emph1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYa]pl2+o]cl.intr1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYa]pl2+um]cl.incl1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYu]pl2+e]cl.emph1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYu]pl2+o]cl.intr1
coVl]rt+nY]pst+elY]2sh.br+eVnYrYu]pl2
coVl]rt+nY]pst+elY]2sh.br+eVnYrYu]pl2+um]cl.incl1
coVl]rt+nY]pst+elY]2sh.br+o]cl.intr1
coVl]rt+nY]pst+enY]
coVl]rt+nY]pst+enY]1s+A]cl.intr2
coVl]rt+nY]pst+enY]1s+ammA]voc.f
coVl]rt+nY]pst+enY]1s+appA]voc.m
coVl]rt+nY]pst+enY]1s+atA]voc.m
coVl]rt+nY]pst+enY]1s+atI]voc.f
coVl]rt+nY]pst+enY] 1 s+ayyA]voc.mh
coVl]rt+nY]pst+enY]1s+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYa]pl2
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+kUta]cl.incl2
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+mattum]cl.rest
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+enY]1s+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+A]cl.intr2
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+o]cl.intr1
coVl]rt+nY]pst+enY]1s+eVnYa]pl2+um]cl.incl1
coVl]rt+nY]pst+enY]1s+eVnYawAnY]cl.emph2
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+A]cl.intr2
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+o]cl.intr1
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+um]cl.incl1
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+enY]1s+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+enY]1s+eVnYrYa]pl2
coVl]rt+nY]pst+enY]1s+eVnYrYu]pl2+A]cl.intr2
coVl]rt+nY]pst+enY]1s+eVnYrYAl]pl2
coVl]rt+nY]pst+enY]1s+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+nY]pst+enY]1s+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+nY]pst+enY]1s+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+nY]pst+enY]1s+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+nY]pst+enY]1s+eVnYrYa]pl2+A]cl.intr2

coVnYnYenYeVnYrYavAvawu
coVnYnYenYeVnYrYAvawu
coVnYnYenYeVnYrYave
coVnYnYenYeVnYrYavo
coVnYnYenYeVnYrYavum
coVnYnYenYeVnYrYe
coVnYnYenYeVnYrYo
coVnYnYenYeVnYrYu
coVnYnYenYeVnYrYum
coVnYnYenYo
coVnYnYenYpAr
coVnYnYIr
coVnYnYIrA
coVnYnYI ram mA
coVnYnYI rappA
coVnYnYI ratA
coVnYnYIratI
coVn Yn YI rayyA
coVnYnYIre
coVnYnYIreVnYa
coVnYnYIreVnYakUta
coVnYnYIreVnYamattum
coVnYnYIreVnYappatuvawA
coVnYnYIreVnYappatuvawAvawu
coVnYnYIreVnYappatuvawe
coVn YnYI re Vn Yappatuvawo
coVnYnYIreVnYappatuvawu
coVnYnYIreVnYappatuvawukUta
coVnYnYIreVnYappatuvawum
coVnYnYIreVnYappatuvawumattum
coVnYnYIreVnYappatuvawuwAnY
coVnYnYIreVnYavA
coVnYnYIreVnYavAvawu
coVnYnYIreVnYave
coVnYnYIreVnYavo
coVnYnYIreVnYavum
coVnYnYIreVnYawAnY
coVnYnYI reVnYpawA
coVnYnYIreVnYpawAvawu
coVnYnYI reVnYpawc
coVnYnYIreVnYpawo
coVnYnYIreVnYpawu
coVnYnYIreVnYpawukUta
coVnYnYI reVnYpawum
coVnYnYIreVnYpawumattum
coVnYnYI reVnYpawuwAnY
coVnYnYIreVnYrYa
coVnYnYIreVnYrYA
coVnYnYI reVnYrYAl
coVnYnYIreVnYrYAlA
coVnYnYI reVnYrYAlAvawu
coVnYnYI reVnYrYAle
coVnYnYIreVnYrYAlo
coVnYnYIreVnYrYAlum
coVnYnYIreVnYrYavA
coVnYnYI reVnYrYavAvawu
coVnYnYIreVnYrYAvawu
coVnYnYIreVnYrYave
coVnYnYIreVnYrYavo
coVnYnYIreVnYrYavum
coVnYnYIreVnYrYe
coVnYnYIreVnYrYo
coVnYnYIreVnYrYu
coVnYnYIreVnYrYum
coVnYnYI rkalY
coVnYnYI rkalYA
coVnYnYIrkalYammA
coVnYnYIrkalYappA

coVl]rt+nY]pst+enY]1s+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+enY]1s+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+nY]pst+enY]1s+eVnYrYa]pl2+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYrYa]pl2+o]cl.intr1
coVl]rt+nY]pst+enY]1s+eVnYrYa]pl2+um]cl.incl1
coVl]rt+nY]pst+enY]1s+eVnYrYu]pl2+e]cl.emph1
coVl]rt+nY]pst+enY]1s+eVnYrYu]pl2+o]cl.intr1
coVl]rt+nY]pst+enY]1s+eVnYrYu]pl2
coVl]rt+nY]pst+enY]1s+eVnYrYu]pl2+um]cl.incl1
coVl]rt+nY]pst+enY] 1 s+o]cl.intr1
coVl]rt+nY]pst+enY]1s+pArJaux
coVl]rt+nY]pst+Ir
coVl]rt+nY]pst+Ir]2shl/p+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+ammA]voc.f
coVl]rt+nY]pst+Ir]2shl/p+appA]voc.m
coVl]rt+nY]pst+Ir]2shl/p+atA]voc.m
coVl]rt+nY]pst+Ir]2shl/p+atI]voc.f
coVl]rt+nY]pst+Ir]2shl/p+ayyA]voc.mh
coVl]rt+nY]pst+Ir]2shl/p+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+kUta]cl.incl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+mattum]cl.rest
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+Avawu]cl.min
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+o]cl.intr1
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+um]cl.incl1
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+Ir]2shl/p+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+o]cl.intr1
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+um]cl.incl1
coVl]rt+nY]pst+Ir]2shl/p+eVnYa]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+Avawu]cl.min
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+o]cl.intr1
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+kUta]cl.incl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+um]cl.incl1
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+mattum]cl.rest
coVl]rt+nY]pst+Ir]2shl/p+eVnYpawu]pl2+wAnY]cl.emph2
coVl]rt+nY]pst+ Ir]2shl/p+eVnYrYa] pl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYu]pl2+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYAl] pl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYAl]pl2+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYAl]pl2+Avawu]cl.min
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYAl]pl2+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYAl]pl2+o]cl.intr1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYAl]pl2+um]cl.incl1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYa]pl2+A]cl.intr2
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYa]pl2+Avawu]cl.min
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYu]pl2+Avawu]cl.min
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYa]pl2+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYa]pl2+o]cl.intr1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYa]pl2+um]cl.incl1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYa]pl2+e]cl.emph1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYu]pl2+o]cl.intr1
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYu]pl2
coVl]rt+nY]pst+Ir]2shl/p+eVnYrYu]pl2+um]cl.incl1
coVl]rt+nY]pst+IrkalY]2p/h
coVl]rt+nY]pst+IrkalY]2p/h+A]cl.intr2
coVl]rt+nY]pst+IrkalY]2p/h+ammA]voc.f
coVl]rt+nY]pst+IrkalY]2p/h+appA]voc.m

coVnYnYIrkalYatA	coVl]rt+nY]pst+IrkalY]2p/h+atA]voc.m
coVnYnYIrkalYatI	coVl]rt+nY]pst+IrkalY]2p/h+atI]voc.f
coVnYnYIrkalYayyA	coVl]rt+nY]pst+IrkalY]2p/h+ayyA]voc.mh
coVnYnYIrkalYe	coVl]rt+nY]pst+IrkalY]2p/h+e]cl.emph1
coVnYnYIrkalYeVnYa	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2
coVnYnYIrkalYeVnYakUta	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+kUta]cl.incl2
coVnYnYIrkalYeVnYamattum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+mattum]cl.rest
coVnYnYIrkalYeVnYappatuvawA	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+A]cl.intr2
coVnYnYIrkalYeVnYappatuvawAvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+Avawu]cl.min
coVnYnYIrkalYeVnYappatuvawe	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+e]cl.emph1
coVnYnYIrkalYeVnYappatuvawo	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+o]cl.intr1
coVnYnYIrkalYeVnYappatuvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2
coVnYnYIrkalYeVnYappatuvawukUta	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+kUta]cl.incl2
coVnYnYIrkalYeVnYappatuvawum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+um]cl.incl1
coVnYnYIrkalYeVnYappatuvawumattum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+mattum]cl.rest
coVnYnYIrkalYeVnYappatuvawuwAnY	coVl]rt+nY]pst+IrkalY]2p/h+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVnYnYIrkalYeVnYavA	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+A]cl.intr2
coVnYnYIrkalYeVnYavAvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+Avawu]cl.min
coVnYnYIrkalYeVnYave	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+e]cl.emph1
coVnYnYIrkalYeVnYavo	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+o]cl.intr1
coVnYnYIrkalYeVnYavum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+um]cl.incl1
coVnYnYIrkalYeVnYawAnY	coVl]rt+nY]pst+IrkalY]2p/h+eVnYa]pl2+wAnY]cl.emph2
coVnYnYIrkalYeVnYpawA	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+A]cl.intr2
coVnYnYIrkalYeVnYpawAvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+Avawu]cl.min
coVnYnYIrkalYeVnYpawe	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+e]cl.emph1
coVnYnYIrkalYeVnYpawo	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+o]cl.intr1
coVnYnYIrkalYeVnYpawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2
coVnYnYIrkalYeVnYpawukUta	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+kUta]cl.incl2
coVnYnYIrkalYeVnYpawum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+um]cl.incl1
coVnYnYIrkalYeVnYpawumattum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+mattum]cl.rest
coVnYnYIrkalYeVnYpawuwAnY	coVl]rt+nY]pst+IrkalY]2p/h+eVnYpawu]pl2+wAnY]cl.emph2
coVnYnYIrkalYeVnYrYa	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYa]pl2
coVnYnYIrkalYeVnYrYA	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYu]pl2+A]cl.intr2
coVnYnYIrkalYeVnYrYAl	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYAl]pl2
coVnYnYIrkalYeVnYrYAlA	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYAl]pl2+A]cl.intr2
coVnYnYIrkalYeVnYrYAlAvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYAl]pl2+Avawu]cl.min
coVnYnYIrkalYeVnYrYAle	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYAl]pl2+e]cl.emph1
coVnYnYIrkalYeVnYrYAlo	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYAl]pl2+o]cl.intr1
coVnYnYIrkalYeVnYrYAlum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYAl]pl2+um]cl.incl1
coVnYnYIrkalYeVnYrYavA	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYa]pl2+A]cl.intr2
coVnYnYIrkalYeVnYrYavAvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYa]pl2+Avawu]cl.min
coVnYnYIrkalYeVnYrYAvawu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYu]pl2+Avawu]cl.min
coVnYnYIrkalYeVnYrYave	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYa]pl2+e]cl.emph1
coVnYnYIrkalYeVnYrYavo	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYa]pl2+o]cl.intr1
coVnYnYIrkalYeVnYrYavum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYa]pl2+um]cl.incl1
coVnYnYIrkalYeVnYrYe	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYu]pl2+e]cl.emph1
coVnYnYIrkalYeVnYrYo	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYu]pl2+o]cl.intr1
coVnYnYIrkalYeVnYrYu	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYu]pl2
coVnYnYIrkalYeVnYrYum	coVl]rt+nY]pst+IrkalY]2p/h+eVnYrYu]pl2+um]cl.incl1
coVnYnYIrkalYo	coVl]rt+nY]pst+IrkalY]2p/h+o]cl.intr1
coVnYnYIro	coVl]rt+nY]pst+Ir]2shl/p+o]cl.intr1
coVnYnYom	coVl]rt+nY]pst+om]1pl
coVnYnYomA	coVl]rt+nY]pst+om]1pl+A]cl.intr2
coVnYnYomammA	coVl]rt+nY]pst+om]1pl+ammA]voc.f
coVnYnYomappA	coVl]rt+nY]pst+om]1pl+appA]voc.m
coVnYnYomatA	coVl]rt+nY]pst+om]1pl+atA]voc.m
coVnYnYomatI	coVl]rt+nY]pst+om]1pl+atI]voc.f
coVnYnYomayyA	coVl]rt+nY]pst+om]1pl+ayyA]voc.mh
coVnYnYome	coVl]rt+nY]pst+om]1pl+e]cl.emph1
coVnYnYomeVnYa	coVl]rt+nY]pst+om]1pl+eVnYa]pl2
coVnYnYomeVnYakUta	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+kUta]cl.incl2
coVnYnYomeVnYamattum	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+mattum]cl.rest
coVnYnYomeVnYappatuvawA	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+A]cl.intr2
coVnYnYomeVnYappatuvawAvawu	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+Avawu]cl.min
coVnYnYomeVnYappatuvawe	coVl]rt+nY] pst+ om] 1 pl+ eVnYappatuvawu]pl2+e]cl.emph1
coVnYnYomeVnYappatuvawo	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+o]cl.intr1
coVnYnYomeVnYappatuvawu	coVl]rt+nY]pst+om] 1 pl+eVnYappatuvawu]pl2
coVnYnYomeVnYappatuvawukUta	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+kUta]cl.incl2

coVnYnYomeVnYappatuvawum	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+um]cl.incl1
coVnYnYomeVnYappatuvawumattum	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+mattum]cl.rest
coVnYnYomeVnYappatuvawuwAnY	coVl]rt+nY]pst+om]1pl+eVnYappatuvawu]pl2+wAnY]cl.emph2
coVnYnYomeVnYavA	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+A]cl.intr2
coVnYnYomeVnYavAvawu	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+Avawu]cl.min
coVnYnYomeVnYave	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+e]cl.emph1
coVnYnYomeVnYavo	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+o]cl.intr1
coVnYnYomeVnYavum	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+um]cl.incl1
coVnYnYomeVnYawAnY	coVl]rt+nY]pst+om]1pl+eVnYa]pl2+wAnY]cl.emph2
coVnYnYomeVnYpawA	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+A]cl.intr2
coVnYnYomeVnYpawAvawu	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+Avawu]cl.min
coVnYnYomeVnYpawe	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+e]cl.emph1
coVnYnYomeVnYpawo	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+o]cl.intr1
coVnYnYomeVnYpawu	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2
coVnYnYomeVnYpawukUta	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+kUta]cl.incl2
coVnYnYomeVnYpawum	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+um]cl.incl1
coVnYnYomeVnYpawumattum	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+mattum]cl.rest
coVnYnYomeVnYpawuwAnY	coVl]rt+nY]pst+om]1pl+eVnYpawu]pl2+wAnY]cl.emph2
coVnYnYomeVnYrYa	coVl]rt+nY]pst+om]1pl+eVnYrYa]pl2
coVnYnYomeVnYrYA	coVl]rt+nY]pst+om]1pl+eVnYrYu]pl2+A]cl.intr2
coVnYnYomeVnYrYAl	coVl]rt+nY]pst+om]1pl+eVnYrYAl]pl2
coVnYnYomeVnYrYAlA	coVl]rt+nY]pst+om]1pl+eVnYrYAl]pl2+A]cl.intr2
coVnYnYomeVnYrYAlAvawu	coVl]rt+nY]pst+om]1pl+eVnYrYAl]pl2+Avawu]cl.min
coVnYnYomeVnYrYAle	coVl]rt+nY]pst+om]1pl+eVnYrYAl]pl2+e]cl.emph1
coVnYnYomeVnYrYAlo	coVl]rt+nY]pst+om]1pl+eVnYrYAl]pl2+o]cl.intr1
coVnYnYomeVnYrYAlum	coVl]rt+nY]pst+om]1pl+eVnYrYAl]pl2+um]cl.incl1
coVnYnYomeVnYrYavA	coVl]rt+nY]pst+om]1pl+eVnYrYa]pl2+A]cl.intr2
coVnYnYomeVnYrYavAvawu	coVl]rt+nY]pst+om]1pl+eVnYrYa]pl2+Avawu]cl.min
coVnYnYomeVnYrYAvawu	coVl]rt+nY]pst+om]1pl+eVnYrYu]pl2+Avawu]cl.min
coVnYnYomeVnYrYave	coVl]rt+nY]pst+om]1pl+eVnYrYa]pl2+e]cl.emph1
coVnYnYomeVnYrYavo	coVl]rt+nY]pst+om]1pl+eVnYrYa]pl2+o]cl.intr1
coVnYnYomeVnYrYavum	coVl]rt+nY]pst+om]1pl+eVnYrYa]pl2+um]cl.incl1
coVnYnYomeVnYrYe	coVl]rt+nY]pst+om]1pl+eVnYrYu]pl2+e]cl.emph1
coVnYnYomeVnYrYo	coVl]rt+nY]pst+om]1pl+eVnYrYu]pl2+o]cl.intr1
coVnYnYomeVnYrYu	coVl]rt+nY]pst+om]1pl+eVnYrYu]pl2
coVnYnYomeVnYrYum	coVl]rt+nY]pst+om]1pl+eVnYrYu]pl2+um]cl.incl1
coVnYnYomo	coVl]rt+nY]pst+om]1pl+o]cl.intr1
coVnYnYompAr	coVl]rt+nY]pst+om]1pl+pAr]aux

Appendix IV — e
List of Inflectional forms for the Adjective *'puwu'*

puwu	puwu]fr
puwumAwiri	puwu]fr+mAwiri]pl1
puwumAwiriyA	puwu]fr+mAwiri]pl1+A]cl.intr2
puwumAwiriyAka	puwu]fr+mAwiri]pl1+Aka]pp
puwumAwiriyAnYa	puwu]fr+mAwiri]pl1+AnYa
puwumAwiriyAnYawA	puwu]fr+mAwiri]pl1+AnYa]pp+A]cl.intr2
puwumAwiriyAnYawAvawu	puwu]fr+mAwiri]pl1+AnYa]pp+Avawu]cl.min
puwumAwiriyAnYaweVnYa	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa
puwumAwiriyAnYaweVnYavA	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+A]cl.intr2
puwumAwiriyAnYaweVnYavAvawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+Avawu]cl.min
puwumAwiriyAnYaweVnYave	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+e]cl.emph1
puwumAwiriyAnYaweVnYakUta	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+kUta]cl.incl2
puwumAwiriyAnYaweVnYamattum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+mattum]cl.rest
puwumAwiriyAnYaweVnYavo	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+o]cl.intr1
puwumAwiriyAnYaweVnYavum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+um]cl.incl1
puwumAwiriyAnYaweVnYawAnY	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYa]pl2+wAnY]cl.emph2
puwumAwiriyAnYaweVnYappatuvawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2
puwumAwiriyAnYaweVnYappatuvawA	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+A]cl.intr2
puwumAwiriyAnYaweVnYappatuvawAvawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+Avawu]cl.min
puwumAwiriyAnYaweVnYappatuvawe	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+e]cl.emph1
puwumAwiriyAnYaweVnYappatuvawukUta	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+kUta]cl.incl2
puwumAwiriyAnYaweVnYappatuvawumattum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+mattum]cl.rest
puwumAwiriyAnYaweVnYappatuvawo	puwu]fr+mAwirijpll+AnYa]pp+eVnYappatuvawu]pl2+o]cl.intrl
puwumAwiriyAnYaweVnYappatuvawum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+um]cl.incl1
puwumAwiriyAnYaweVnYappatuvawuwAnY	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYappatuvawu]pl2+wAnY]cl.emph2
puwumAwiriyAnYaweVnYpawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2
puwumAwiriyAnYaweVnYpawA	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+A]cl.intr2
puwumAwiriyAnYaweVnYpawAvawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+Avawu]cl.min
puwumAwiriyAnYaweVnYpawe	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+e]cl.emph1
puwumAwiriyAnYaweVnYpawukUta	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+kUta]cl.incl2
puwumAwiriyAnYaweVnYpawumattum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+mattum]cl.rest
puwumAwiriyAnYaweVnYpawo	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+o]cl.intr1
puwumAwiriyAnYaweVnYpawum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+um]cl.incl1
puwumAwiriyAnYaweVnYpawuwAnY	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYpawu]pl2+wAnY]cl.emph2
puwumAwiriyAnYaweVnYrYAl	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2
puwumAwiriyAnYaweVnYrYAlA	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+A]cl.intr2
puwumAwiriyAnYaweVnYrYAlAvawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+Avawu]cl.min
puwumAwiriyAnYaweVnYrYAle	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+e]cl.emph1
puwumAwiriyAnYaweVnYrYAlkUta	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+kUta]cl.incl2
puwumAwiriyAnYaweVnYrYAlmattum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+mattum]cl.rest
puwumAwiriyAnYaweVnYrYAlo	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+o]cl.intr1
puwumAwiriyAnYaweVnYrYAlum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+um]cl.incl1
puwumAwiriyAnYaweVnYrYAlwAnY	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYAl]pl2+wAnY]cl.emph2
puwumAwiriyAnYaweVnYrYu	puwu]fr+mAwiri]pl1+AnYajpp+eVnYrYu]pl2
puwumAwiriyAnYaweVnYrYA	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+A]cl.intr2
puwumAwiriyAnYaweVnYrYAvawu	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+Avawu]cl.min
puwumAwiriyAnYaweVnYrYe	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+e]cl.emph1
puwumAwiriyAnYaweVnYrYukUta	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+kUta]cl.incl2
puwumAwiriyAnYaweVnYrYumattum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+mattum]cl.rest
puwumAwiriyAnYaweVnYrYo	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+o]cl.intr1
puwumAwiriyAnYaweVnYrYum	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+um]cl.incl1
puwumAwiriyAnYaweVnYrYuwAnY	puwu]fr+mAwiri]pl1+AnYa]pp+eVnYrYu]pl2+wAnY]cl.emph2
puwumAwiriyAnYawe	puwu]fr+mAwiri]pl1+AnYa]pp+e]d.cmphl
puwumAwiriyAnYawkUta	puwu]fr+mAwiri]pl1+AnYa]pp+kUta]cl.incl2
puwumAwiriyAnYawmattum	puwu]fr+mAwiri]pl1+AnYa]pp+mattum]cl.rest
puwumAwiriyAnYawo	puwu]fr+mAwiri]pl1+AnYa]pp+o]cl.intr1
puwumAwiriyAnYawum	puwu]fr+mAwiri]pl1+AnYa]pp+um]cl.incl1
puwumAwiriyAnYawwAnY	puwu]fr+mAwiri]pl1+AnYa]pp+wAnY]cl.emph2
puwumAwiriyAvawu	puwu]fr+mAwiri]pl1+Avawu]cl.min
puwumAwiriyeVnYa	puwu]fr+mAwiri]pl1+eVnYa
puwumAwiriyeVnYavA	puwu]fr+mAwiri]pl1+eVnYa]pl2+A]cl.intr2
puwumAwiriyeVnYavAvawu	puwu]fr+mAwiri]pl1+eVnYa]pl2+Avawu]cl.min
puwumAwiriyeVnYave	puwu]fr+mAwiri]pl1+eVnYa]pl2+e]cl.emph1

puwumA wiriyeVnYakU ta
puwumAwiriyeVnYamattum
puwumA wiriyeVnYavo
puwumAwiriyeVnYavum
puwumAwiriyeVnYawAnY
puwumAwiriyeVnYappatuvawu
puwumAwiriyeVnYappatuvawA
puwumA wiriyeVnYappatuvawA vawu
puwumAwiriyeVnYappatuvawe
puwumAwiriye VnYappatuvawukU ta
puwumA wiriyeVnYappatuvawumattum
puwumAwiriyeVnYappatuvawo
puwumAwiriyeVnYappatuvawum
puwumAwiriyeVnYappatuvawuwAnY
puwumA wiriyeVnYpawu
puwumAwiriyeVnYpawA
puwumAwiriyeVnYpawAvawu
puwumAwiriyeVnYpawe
puwumAwiriyeVnYpawukU ta
puwumAwiriyeVnYpawumattum
puwumA wiriyeVnYpawo
puwumAwiriyeVnYpawum
puwumAwiriyeVnYpawuwAnY
puwumAwiriyeVnYrYAl
puwumAwiriyeVnYrYAlA
puwumA wiriyeVnYrYAlA vawu
puwumA wiriyeVnYrYAle
puwumA wiriyeVnYrY AlkU ta
puwumA wiriyeVnYrYAlmattum
puwumA wiriyeVnYrYAlo
puwumA wiriyeVnYrY Alum
puwumAwiriyeVnYrYAlwAnY
puwumA wiriycVnYrY u
puwumA wiriyeVnYrYA
puwumA winyeVnYrY A vawu
puwumA wiriyeVnYrYe
puwumA wiriyeVnYrYukU ta
puwumA wiriyeVnYrYumattum
puwumA wiriyeVnYrYo
puwumAwiriyeVnYrYum
puwumA wiriyeVnYrYuwAnY
puwumA wiriye
puwumA wiriykU ta
puwumA wiriymattum
puwumAwiriyo
puwumA wiriyum
puwumA wiriwAnY
puwuviwam
puwuviwamA
puwuviwamAka
puwuviwamAnYaw
puwuviwamAnY awA
puwu viwamAnYawA vawu
puwuviwamAnY awcVnYa
puwuviwamAnY awcVnYavA
puwuviwamAnY awe VnYavAvawu
puwuviwamAnY awcVnYavc
puwuviwamAnY awe Vn YakU ta
puwuviwamAnY awcVnYamattum
puwuviwamAnY awcVnYavo
puwuviwamAnY aweVnYavum
puwuviwamAnY awcVnYawAnY
puwuviwamAnYaweVnYappatuvawu
puwuviwamAnY awe VnYappatuvawA
puwuviwamAnY aweVnYappatuvawA vawu
puwuviwamAnY awe VnYappatuvawc
puwuviwamAnY awe Vn Yappatuvawuk U ta
puwuviwamAnY aweVn Yappatuvawum attum

puwu]fr+mAwiri]pl1+eVnYa]pl2+kUta]cl.incl2
puwu]fr+mAwiri]pl1+eVnYa]pl2+mattum]cl.rest
puwu]fr+mAwiri]pl1+eVnYa]pl2+o]cl.intr1
puwu]fr+mAwiri]pl1+eVnYa]pl2+um]cl.incl1
puwu]fr+mAwiri]pl1+eVnYa]pl2+wAnY]cl.emph2
puwu] fr+mAwiri]pl1+ e VnYappatuvawu] pl2
puwu]fr+mAwiri]pl1+eVnYappatuvawu]pl2+A]cl.intr2
puwu]fr+mAwiri]pll+eVnYappatuvawu]pl2+Avawu}cl.min
puwu]fr+mAwiri]pl1+eVnYappatuvawu]pl2+e]cl.emph1
puwu]fr+mAwiri]pl1+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu] fr+mAwiri]pl1+ eVnYappatu vawu] pl2+ mattum]cl.rest
puwu]fr+mAwiri]pl1+eVnYappatuvawu]pl2+o]cl.intr1
puwu]fr+mAwiri]pl1+eVnYappatuvawu]pl2+um]cl.incl1
puwu]fr+mAwiri]pl1+eVnYappatuvawu]pl2+wAn Y]cl.emph2
puwu]fr+mAwiri]pl1+eVnYpawu]pl2
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+A]cl.intr2
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+Avawu]cl.min
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+e]cl.emph1
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+kUta]cl.incl2
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+mattum]cl.rest
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+o]cl.intr1
puwu]fr+mAwiri]pl1+eVnYpawu]pl2+um]cl.incl1
puwujfr+mAwirijpll +eVnYpawu]pl2+wAnY]cl.emph2
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+A]cl.intr2
puwu]fr+mAwiri]pl1+cVnYrYAl]pl2+Avawu]d.min
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+e]cl.emph1
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+kUta]cl.incl2
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+mattum]cl.rest
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+o]cl.intr1
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+um]cl.incl1
puwu]fr+mAwiri]pl1+eVnYrYAl]pl2+wAnY]cl.emph2
puwu]fr+mAwiri]pl1+eVnYrYu]pl2
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+A]cl.intr2
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+Avawu]cl.min
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+e]cl.emph1
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+kUta]cl.incl2
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+mattum]cl.rest
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+o]cl.intr1
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+um]cl.incl1
puwu]fr+mAwiri]pl1+eVnYrYu]pl2+wAnY]cl.emph2
puwu] fr+mAwiri]pl1+e]cl.emph1
puwu]fr+mAwiri]pl1+kUta]cl.incl2
puwu] fr+mAwiri]pl1+mattum]cl.rest
puwujfr+mAwirijpll +o]cl.intr1
puwu]fr+mAwiri]pl1+um]cl.incl1
puwu]fr+mAwiri]pl1+wAnY]cl.emph2
puwu] fr+viwam]pll
puwu]fr+viwam]pl1+A]cl.intr2
puwu] fr+viwam]pl1+ Aka]pp
puwu] fr+viwam]pl1+AnYa]pp
puwu]fr+viwam]pl1+AnYa]pp+A]cl.intr2
puwu] fr+viwam]pll +AnYa]pp+Avawu]cL.min
puwu] fr+viwam]pll+AnYa]pp+ cVnYa
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+A]cl.intr2
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+e]cl.emph1
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+kUta]cl.incl2
puwu] fr+viwam]pl1+AnYa]pp+ eVnYa]pl2+mattum] cl. rest
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+o]cl.intr1
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+um]cl.incl1
puwu]fr+viwam]pl1+AnYa]pp+eVnYa]pl2+wAnY]cl.emph2
puwu] fr+viwam]pl1+ AnYa]pp+ eVnYappatuvawujpl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+A]cl.intr2
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+e]cl.emph1
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+mattum]cl.rest

puwuviwamAnYaweVnYappatuvawo
puwuviwamAnYaweVnYappatuvawum
puwuviwamAnYaweVnYappatuvawuwAnY
puwuviwamAnYaweVnYpawu
puwuviwamAnYaweVnYpawA
puwuviwamAnYaweVnYpawAvawu
puwuviwamAnYaweVnYpawe
puwuviwamAnYaweVn YpawukU ta
puwuviwamAnYaweVnYpawumattum
puwuviwamAnYaweVnYpawo
puwuviwamAnYaweVnYpawum
puwuviwamAnYaweVnYpawuwAnY
puwuviwamAnYaweVnYrYAl
puwuviwamAnYaweVnYrYAlA
puwuviwamAnYaweVnYrYAlAvawu
puwuviwamAnYaweVnYrYAle
puwuviwamAnYaweVnYrYAlkUta
puwuviwamAnYaweVnYrYAlmattum
puwuviwamAnYaweVnYrYAlo
puwuviwamAnYaweVnYrYAlum
puwuviwamAnYaweVnYrYAlwAnY
puwuviwamAnYaweVnYrYu
puwuviwamAnYaweVnYrYA
puwuviwamAnYaweVnYrYAvawu
puwuviwamAnYaweVnYrYe
puwuviwamAnYaweVn YrYukU ta
puwuviwamAnYaweVnYrYumattum
puwuviwamAnYaweVnYrYo
puwuviwamAnYaweVnYrYum
puwuviwamAnYaweVnYrYuwAnY
puwuviwamAnYawe
puwu viwamAn YawkU ta
puwuviwamAnYawmattum
puwuviwamAnYawo
puwuviwamAnYawum
puwuviwamAnY a ww An Y
puwuviwamAvawu
puwuviwameVnYa
puwuviwameVnYavA
puwuviwameVnYavAvawu
puwuviwameVnYave
puwuviwame VnYakU ta
puwuviwame V nYamattum
puwuviwameVnYavo
puwuviwameVnYavum
puwuviwameVnYawAnY
puwuviwameVnYappatuvawu
puwuviwameVnYappatuvawA
puwuviwameVnYappatuvawAvawu
puwuviwameVnYappatuvawe
puwuviwameVnYappatuvawukU ta
puwuviwameVnYappatuvawumattum
puwuviwameVnYappatuvawo
puwuviwameVnYappatuvawum
puwuviwameVnYappatuvawuwAnY
puwuviwameVnYpawu
puwuviwameVnYpawA
puwuviwameVnYpawAvawu
puwuviwameVnYpawe
puwuviwame VnYpawukU ta
puwuviwameVnYpawumattum
puwuviwameV nYpawo
puwuviwamcV nYpawum
puwuviwameVnYpawuwAnY
puwuviwameVnYrYAl
puwuviwameVnYrYAlA
puwuviwameVnYrYAlAvawu
puwuviwameVnYrYAle

puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+o]cl.intr1
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+um]cl.incl1
puwu]fr+viwam]pl1+AnYa]pp+eVnYappatuvawu]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+A]cl.intr2
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+e]cl.emph1
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+o]cl.intr1
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+um]cl.incl1
puwu]fr+viwam]pl1+AnYa]pp+eVnYpawu]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+A]cl.intr2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+e]cl.emph1
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+o]cl.intr1
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+um]cl.incl1
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYAl]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+A] cl.intr2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+e]cl.emph1
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+o]cl.intr1
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+um]cl.incl1
puwu]fr+viwam]pl1+AnYa]pp+eVnYrYu]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+AnYa]pp+e]cl.emph1
puwu]fr+viwam]pl1+AnYa]pp+kUta]cl.incl2
puwu]fr+viwam]pl1+AnYa]pp+mattum]cl.rest
puwu]fr+viwam]pl1+AnYa]pp+o]cl.intr1
puwu]fr+viwam]pl1+AnYa]pp+um]cl.incl1
puwu]fr+viwam]pl1+AnYa]pp+wAnY]cl.emph2
puwu]fr+viwam]pl1+Avawu]cl.min
puwu]fr+viwam]pl1+eVnYa
puwu]fr+viwam]pl1+eVnYa]pl2+A]cl.intr2
puwu]fr+viwam]pl1+eVnYa]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+eVnYa]pl2+e]cl.emph1
puwu]fr+viwam]pl1+eVnYa]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+eVnYa]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+eVnYa]pl2+o]cl.intr1
puwu]fr+viwam]pl1+eVnYa]pl2+um]cl.incl1
puwu]fr+viwam]pl1+eVnYa]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+A]cl.intr2
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+e]cl.emph1
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+mattum]cl. rest
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+o]cl.intr1
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+um]cl.incl1
puwu]fr+viwam]pl1+eVnYappatuvawu]pl2+wAn Y]cl.emph2
puwu]fr+viwam]pl1+eVnYpawu]pl2
puwu] fr+viwam]pl1+eVnYpawu]pl2+A]cl.intr2
puwu]fr+viwam]pl1+eVnYpawu]pl2+Avawu]cl.min
puwu] fr+viwam]pl 1+eVnYpawu]pl2+e] cl. emph1
puwu]fr+viwam]pl1+eVnYpawu]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+eVnYpawu]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+eVnYpawu]pl2+o]cl.intr1
puwu]fr+viwam]pl1+eVnYpawu]pl2+um]cl.incl1
puwu]fr+viwam]pl1+eVnYpawu]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+eVnYrYAl]pl2
puwu]fr+viwam]pl1+eVnYrYAl]pl2+A]cl.intr2
puwu]fr+viwam]pl1+eVnYrYAl]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+eVnYrYAl]pl2+e]cl.emph1

puwuviwameVnYrYAlkUta
puwuviwameVnYrYAlmattum
puwuviwameVnYrYAlo
puwuviwameVnYrYAlum
puwuviwameVnYrYAlwAnY
puwuviwameVnYrYu
puwuviwameVnYrYA
puwuviwameVnYrYAvawu
puwuviwameVnYrYe
puwuviwameVnYrYukUta
puwuviwameVnYrYumattum
puwuviwameVnYrYo
puwuviwameVnYrYum
puwuviwameVnYrYuwAnY
puwuviwame
puwuviwamkUta
puwuviwammattum
puwuviwamo
puwuviwamum
puwuviwamwAnY
puwiya
puwiyavalY
puwiyavalYA
puwiyavalYAvawu
puwiyavalYeVnYa
puwiyavalYeVnYavA
puwiyavalYeVnYavAvawu
puwiyavalYeVnYave
puwiyavalYeVnYakUta
puwiyavalYeVnYamattum
puwiyavalYeVnYavo
puwiyavalYeVnYavum
puwiyavalYeVnYawAnY
puwiyavalYeVnYappatuvawu
puwiyavalYeVnYappatuvawA
puwiyavalYeVnYappatuvawAvawu
puwiyavalYeVnYappatuvawe
puwiyavalYeVnYappatuvawukUta
puwiyavalYeVnYappatuvawumattum
puwiyavalYeVnYappatuvawo
puwiyavalYeVnYappatuvawum
puwiyavalYeVnYappatuvawuwAnY
puwiyavalYeVnYpawu
puwiyavalYeVnYpawA
puwiyavalYeVnYpawAvawu
puwiyavalYeVnYpawe
puwiyavalYeVnYpawukUta
puwiyavalYeVnYpawumattum
puwiyavalYeVnYpawo
puwiyavalYeVnYpawum
puwiyavalYeVnYpawuwAnY
puwiyavalYeVnYrYAl
puwiyavalYeVnYrYAlA
puwiyavalYeVnYrYAlAvawu
puwiyavalYeVnYrYAle
puwiyavalYeVnYrYAlkUta
puwiyavalYeVnYrYAlmattum
puwiyavalYeVnYrYAlo
puwiyavalYeVnYrYAlum
puwiyavalYeVnYrYAlwAnY
puwiyavalYeVnYrYu
puwiyavalYeVnYrYA
puwiyavalYcVnYrYAvawu
puwiyavalYeVnYrYe
puwiyavalYeVnYrYukUta
puwiyavalYeVnYrYumattum
puwiyavalYeVnYrYo
puwiyavalYeVnYrYum

puwu]fr+viwam]pl1+eVnYrYAl]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+eVnYrYAl]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+eVnYrYAl]pl2+o]cl.intr1
puwu]fr+viwam]pl1+eVnYrYAl]pl2+um]cl.incl1
puwu]fr+viwam]pl1+eVnYrYAl]pl2+wAnY]cl.emph2
puwu]fr+viwam]pll+eVnYrYu]pl2
puwu]fr+viwam]pl1+eVnYrYu]pl2+A]cl.intr2
puwu]fr+viwam]pl1+eVnYrYu]pl2+Avawu]cl.min
puwu]fr+viwam]pl1+eVnYrYu]pl2+e]cl.emph1
puwu]fr+viwam]pl1+eVnYrYu]pl2+kUta]cl.incl2
puwu]fr+viwam]pl1+eVnYrYu]pl2+mattum]cl.rest
puwu]fr+viwam]pl1+eVnYrYu]pl2+o]cl.intr1
puwu]fr+viwam]pl1+eVnYrYu]pl2+um]cl.incl1
puwu]fr+viwam]pl1+eVnYrYu]pl2+wAnY]cl.emph2
puwu]fr+viwam]pl1+e]cl.emph1
puwu]fr+viwam]pl1+kUta]cl.incl2
puwu] fr+viwam]pl1+mattum] cl. rest
puwu] fr+viwam]pl1+o]cl.intr1
puwu] fr+viwam]pl1+um] cl.incl1
puwu]fr+viwam]pl1+wAnY]cl.emph2
puwu]bd+iya]gnpbase
puwu]bd+iya]gnpbase+avalY]3sf
puwu]bd+iya]gnpbase+avalY]3sf+A]cl.intr2
puwu]bd+iya]gnpbase+avalY]3sf+Avawu]cl.min
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYa]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYappatuvawu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYpawu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYAl]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+um]cl.incl1

puwiyavalYeVnYrYuwAnY
puwiyavalYe
puwiya valYkUta
puwiyavalYmattum
puwiyavalYo
puwiyavalYum
puwiyavalYwAnY
puwiyavanY
puwiyavanYA
puwiyavanYAvawu
puwiyavanY cVnYa
puwiyavanYeVnYavA
puwiyavanYeVnYavAvawu
puwiyavanYeVnYave
puwiyavanYeVnYakUta
puwiyavanYeVnYamattum
puwiyavanYeVnYavo
puwiyavanYeVnYavum
puwiyavanYeVnYawAnY
puwiyavanYcVnYappatuvawu
puwiyavan YeVnYappatuvawA
puwiyavanYeVnYappatuvawAvawu
puwiyavanYeVnYappatuvawe
puwiyavan YeVnYappatuvawukU ta
puwiyavanYeVnYappatuvawumattum
puwiyavanYeVnYappatuvawo
puwiyavanYeVnYappatuvawum
puwiyavanYeVnYappatuvawuwAnY
puwiyavan YcVnYpawu
puwiyavanYeVnYpawA
puwiyavan YeVnYpawAvawu
puwiyavan YeVnYpawe
puwiyavanYeVn Ypawuk U ta
puwiyavan YeVnYpawumattum
puwiyavanYeVnYpawo
puwiyavanYeVnYpawum
puwiyavanY cVnYpawuwAnY
puwiyavanYeVnYrYAl
puwiyavanYeVnYrYAlA
puwiyavanYeVnYrYAlAvawu
puwiyavanYeVnYrYAle
puwiyavan YeVnYrYAlkU ta
puwiyavan YeVnYrYAlmattum
puwiyavan YeVnYrYAlo
puwiyavanYeVnYrYAlum
puwiyavanYeVnYrYAlwAnY
puwiyavan YcVnYrYu
puwiyavan YcVnYrYA
puwiyavan YeVnYrYA vawu
puwiyavan YeVnYrYe
puwiyavanYe VnYrYukU ta
puwiyavanYeVnYrYumattum
puwiyavanY eVnYrYo
puwiyavanYeVnYrYum
puwiyavan YcVnYrYuwAnY
puwiyavanYe
puwiyavanYkUta
puwiyavan Ymattum
puwiyavanYo
puwiyavan Yum
puwiyavan YwAnY
puwiyavar
puwiyavarA
puwiyavarAvawu
puwiyavareVnYa
puwiyavareVnYavA
puwiyavareVnYavAvawu
puwiyavareVnYave

puwu]bd+iya]gnpbase+avalY]3sf+eVnYrYu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avalY]3sf+e]cl.emph1
puwu]bd+iya]gnpbase+avalY]3sf+kUta]cl.incl2
puwu]bd+iya]gnpbase+avalY]3sf+mattum]cl.rest
puwu]bd+iya]gnpbase+avalY]3sf+o]cl.intr1
puwu]bd+iya]gnpbase+avalY]3sf+um]cl.incl1
puwu]bd+iya]gnpbase+avalY]3sf+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avanY]3sm
puwu]bd+iya]gnpbase+avanY]3sm+A]cl.intr2
puwu]bd+iya]gnpbase+avanY]3sm+Avawu]cl.min
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYa]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avanY] 3sm+eVnYappatuvawu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYappatuvawu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYpawu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYAl]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avanY]3sm+eVnYrYu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avanY]3sm+e]cl.emph1
puwu]bd+iya]gnpbase+avanY]3sm+kUta]cl.incl2
puwu]bd+iya]gnpbase+avanY]3sm+mattum]cl.rest
puwu]bd+iya]gnpbase+avanY]3sm+o]cl.intr1
puwu]bd+iya]gnpbase+avanY]3sm+um]cl.incl1
puwu]bd+iya]gnpbase+avanY]3sm+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avar]3sh
puwu]bd+iya]gnpbase+avar]3sh+A]cl.intr2
puwu]bd+iya]gnpbase+avar]3sh+Avawu]cl.min
puwu]bd+iya]gnpbase+avar]3sh+eVnYa
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+e]cl.emph1

puwiyavareVnYakUta
puwiyavareVnY amattum
puwiyavareVnYavo
puwiyavareVnY avum
puwiyavareVnYawAnY
puwiyavareVnY appatuvawu
puwiyavareVnYappatuvawA
puwiyavareVnYappatuvawAvawu
puwiyavareVnYappatuvawe
puwiyavare Vn Yappatuvawuk Uta
puwiyavareVnY appatuvawumattum
puwiyavareVnY appatuvawo
puwiyavareVnY appatuvawum
puwiyavareVnY appatuvawuwAnY
puwiyavareVnYpawu
puwiyavareVnY pawA
puwiyavareVnYpawAvawu
puwiyavareVnYpawe
puwiyavareVnYpawukU ta
puwiyavareVnYpawumattum
puwiyavareVnYpawo
puwiyavareVnYpawum
puwiyavareVnY pawuwAnY
puwiyavareVnYrYAl
puwiyavareVnYrYAlA
puwiyavareVnYrYAlAvawu
puwiyavareVnYrYAle
puwiyavareVnY rYAlkUta
puwiyavareVnY rYAlmattum
puwiyavareVnY rYAlo
puwiyavareVnY rYAlum
puwiyavareVnY rYAlwAnY
puwiyavareVnY rYu
puwiyavareVnYrYA
puwiyavareVnYrYAvawu
puwiyavareVnY rYe
puwiyavare Vn YrYukU ta
puwiyavareVnY rYumattum
puwiyavareVnYrYo
puwiyavareVnY rYum
puwiyavareVnY rYuwAnY
puwi ya vare
puwiyavarkUta
puwiyavarmattum
puwiyavaro
puwiyavarum
puwiyavarwAnY
puwiyawu
puwiyawA
puwiyawAvawu
puwiyaweVnYa
puwiyaweVnYavA
puwiyaweVnYavAvawu
puwiyaweVnYave
puwiyaweVnYakUta
puwiyaweVnY amattum
puwiyaweVnYavo
puwiyaweVnYavum
puwiyawe V nY aw AnY
puwiyaweVnYappatuvawu
puwiyaweVnYappatuvawA
puwiyaweVnY appatuvawAvawu
puwiyawe VnY appatuvawe
puwiyawe VnY appatuvawukU ta
puwiyaweVnY appatuvawumattum
puwiyawe VnY appatuva wo
puwiyaweVnY appatuvawum
puwiyaweVnYappatuvawuwAnY

puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avar]3sh+eVnYa]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2
puwu]bd+iya]gnpbase+avar] 3sh+eVnYappatuvawu] pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu] bd+iya] gnpbase+ avar] 3sh+eVnYappatuvawu] pl2+mattum]cl. rest
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avar]3sh+eVnYappatuvawu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2
puwu]bd+iya]gnpbase+ avar] 3sh+eVnYpawu]pl2+A] cl.intr2
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avar]3sh+eVnYpawu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYAl]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+Avawu]cl.min
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+e]cl.emph1
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+avar]3sh+eVnYrYu]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+avar]3sh+e]cl.emph1
puwu]bd+iya]gnpbase+avar]3sh+kUta]cl.incl2
puwu] bd+iya]gnpbase+avar] 3sh+mattum] clrest
puwu]bd+iya]gnpbase+avar]3sh+o]cl.intr1
puwu]bd+iya]gnpbase+avar]3sh+um]cl.incl1
puwu]bd+iya]gnpbase+avar]3sh+wAnY]cl.emph2
puwu]bd+ iya]gnpbase+awu]3sn
pu wu] bd+iya] gnpbase+awu] 3sn+A] cl.intr2
puwu]bd+ iya]gnpbase+awu]3sn+Avawu] cl.min
puwu]bd+iya]gnpbase+awu]3sn+eVnYa
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+A]cl.intr2
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+Avawu]cl.min
puwu]bd+ iya]gnpbase+awu]3sn+eVnYa]pl2+ e]cl.emph1
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+um]cl.incl1
puwu]bd+iya]gnpbase+awu]3sn+eVnYa]pl2+wAnY]cl.emph2
puwu]bd+iya]gnpbase+ awu] 3sn+eVnYappatuvawu]pl2
puwu]bd+iya]gnpbase+awu]3sn+eVnYappatuvawu]pl2+A]cl.intr2
puwu] bd+iya]gnpbase+awu] 3sn+eVnYappatuvawu]pl2+Avawu] cl. min
puwu]bd+iya]gnpbase+awu]3sn+eVnYappatuvawu]pl2+e]cl. emph1
puwu]bd+iya]gnpbase+awu]3sn+eVnYappatuvawu]pl2+kUta]cl.incl2
puwu]bd+iya]gnpbase+awu]3sn+eVnYappatuvawu]pl2+mattum]cl.rest
puwu]bd+iya]gnpbase+awu]3sn+eVnYappatuvawu]pl2+o]cl.intr1
puwu]bd+iya]gnpbase+awu]3sn+eVnYappatuvawu]pl2+um]cl.incl1
puwu]bd+ iya]gnpbase+awu] 3sn+eVnYappatuvawu]pl2+wAnY]cl. emph2

puwiyaweVnYpawu	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2
puwiyaweVnYpawA	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+A]cl.intr2
puwiyaweVnYpawAvawu	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+Avawu]cl.min
puwiyaweVnYpawe	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+e]cl.emph1
puwiy aweVnYpawukUta	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+kUta]cl.incl2
puwiyaweVnYpawumattum	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+mattum]cl.rest
puwiyaweVnYpawo	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+o]cl.intr1
puwiyaweVnYpawum	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+um]cl.incl1
puwiyaweVnYpawuwAnY	puwu]bd+iya]gnpbase+awu]3sn+eVnYpawu]pl2+wAnY]cl.emph2
puwiyaweVnYrYAl	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2
puwiyaweVnYrYAlA	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+A]cl.intr2
puwiyaweVnY rY AlAvawu	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+Avawu]cl.min
puwiyaweVnYrYAle	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+e]cl.emph1
puwiyaweVnYrYAlkU ta	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+kUta]cl.incl2
puwiyaweVnY rYAlmattum	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+mattum]cl.rest
puwiyaweVnYrYAlo	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+o]cl.intr1
puwiyawcVnY rY Alum	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+um]cl.incl1
puwiyaweVnYrYAlwAnY	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYAl]pl2+wAnY]cl.emph2
puwiyaweVnYrYu	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2
puwiyaweVnY rYA	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+A]cl.intr2
puwiyaweVnYrYAvawu	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+Avawu]cl.min
puwiyaweVnY rYc	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+e]cl.emph1
puwiyaweVnY rYukU ta	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+kUta]cl.incl2
puwiyaweVnY rYum attum	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+mattum]cl.rest
puwiyaweVnYrYo	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+o]cl.intr1
puwiyaweVnY rYum	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+um]cl.incl1
puwiyawe VnYrY uw An Y	puwu]bd+iya]gnpbase+awu]3sn+eVnYrYu]pl2+wAnY]cl.emph2
puwiyawe	puwu]bd+iya]gnpbase+awu]3sn+e]cl.emph1
puwiyawukUta	puwu]bd+iya]gnpbase+awu]3sn]+kUta]cl.incl2
puwiyawumattum	puwu]bd+iya]gnpbase+awu]3sn]+mattum]cl.rest
puwiyawo	puwu]bd+iya]gnpbase+awu]3sn]+o]cl.intr1
puwiyawum	puwu]bd+iya]gnpbase+awu]3sn]+um]cl.incl1
puwiyawuwAnY	puwu]bd+iya]gnpbase+awu]3sn]+wAnY]cl.emph2