The CoNLL–SIGMORPHON 2018 Shared Task: Universal Morphological Reinflection

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Abstract

The CoNLL–SIGMORPHON 2018 shared task on supervised learning of morphological generation featured data sets from 103 typologically diverse languages. Apart from extending the number of languages involved in earlier supervised tasks of generating inflected forms, this year the shared task also featured a new second task which asked participants to inflect words in sentential context, similar to a cloze task. This second task featured seven languages. Task 1 received 27 submissions and task 2 received 6 submissions. Both tasks featured a low, medium, and high data condition. Nearly all submissions featured a neural component and built on highly-ranked systems from the earlier 2017 shared task. In the inflection task (task 1), 41 of the 52 languages present in last year's inflection task showed improvement by the best systems in the low-resource setting. The cloze task (task 2) proved to be difficult, and few submissions managed to consistently improve upon both a simple neural baseline system and a lemma-repeating baseline.

1 Introduction

Some of a word's syntactic and semantic properties are expressed on the word form through a process termed morphological inflection. For example, each English count noun has both singular and plural forms (`robot`/`robots`, `process`/`processes`), known as the inflected forms of the noun. Some languages display little inflection, while others possess a proliferation of forms. A Polish verb can have nearly 100 inflected forms and an Archi verb has thousands (Kibrik, 1998).

Natural language processing systems must be able to analyze and generate these inflected forms. Fortunately, inflected forms tend to be systematically related to one another. This is why English speakers can usually predict the singular form from the plural and vice versa, even for words they have never seen before: given a novel noun `wug`, an English speaker knows that the plural is `wugs`.

Lang	Lemma	Inflection	Inflected form
en	`hug`	V;PST	`hugged`
	`spark`	V;V.PTCP;PRS	`sparking`
es	`liberar`	V;IND;FUT;2;SG	`liberarás`
	`descomponer`	V;NEG;IMP;2;PL	`no descompongáis`
de	`aufbauen`	V;IND;PRS;2;SG	`baust auf`
	`Ärztin`	N;DAT;PL	`Ärztinnen`

Table 1: Example training data from task 1. Each training example maps a *lemma* and *inflection* to an *inflected form*, The inflection is a bundle of *morphosyntactic features*. Note that inflected forms (and lemmata) can encompass multiple words. In the test data, the last column (the inflected form) must be predicted by the system.

We conducted a competition on generating inflected forms. This "shared task" consisted of two separate scenarios. In Task 1, participating systems must inflect word forms based on labeled examples. In English, an example of inflection is the conversion of a citation form[1] `run` to its present participle, `running`. The system is provided with the source form and the morphosyntactic description (MSD) of the target form, and must generate the actual target form. Task 2 is a harder version of Task 1, where the system must infer the appropriate MSD from a sentential context. This is essentially a cloze task, asking participants to provide the correct form of a lemma in context.

2 Tasks and Evaluation

2.1 Task 1: Inflection

The first task was identical to sub-task 1 from the CoNLL–SIGMORPHON 2017 shared task (Cotterell et al., 2017), but the language selection was extended from 52 languages to 103. The data sets

[1] In this work we use the terms *citation form* and *lemma* interchangeably.

for the overlapping languages between 2017 and 2018 were also resampled and are not identical. The task consists of morphological generation with sparse training data, something that can be practically useful for MT and other downstream tasks in NLP. Here, participants were given examples of inflected forms as shown in Table 1. Each test example asked participants to produce some other inflected form when given a lemma and a bundle of morphosyntactic features as input.

The training data was sparse in the sense that it included only a few inflected forms from each lemma. That is, as in human L1 learning, the learner does not necessarily observe any complete paradigms in a language where the paradigms are large (e.g., dozens of inflected forms per lemma).[2]

Key points:

1. The task is inflection: Given an input lemma and desired output tags, participants had to generate the correct output inflected form (a string).

2. The supervised training data consisted of individual forms (see Table 1) that were sparsely sampled from a large number of paradigms.

3. Forms that are empirically more frequent were more likely to appear in both training and test data (see §3 for details).

4. Systems were evaluated after training on 10^2 (low), 10^3 (medium), and 10^4 (high) lemma/MSD/inflected form triplets.

2.2 Task 2: Inflection in Context

The cloze test is a common exercise in an L2 instruction setting. In the cloze test, a number of words are deleted from a text and students are required to fill in the gaps with contextually plausible forms, often working from the knowledge about which lemma should be inflected. The second task of the morphology shared task presents two variations of this traditional cloze test in two tracks specifically aimed at data-driven morphology learning.

[2] Of course, human L1 learners do not get to observe explicit morphological feature bundles for the types that they observe. Rather, they analyze inflected tokens in context to discover both morphological features (including *inherent* features such as noun gender (Arnon and Ramscar, 2012)) and paradigmatic structure (number of forms per lemma, number of expressed featural contrasts such as tense, number, person…).

Solving a cloze test well requires integration of many types of evidence beyond the pure capacity to inflect a word on demand. Since our training sets were gathered from actual textual resources, a good solver that accurately determines the most plausible form must implicitly combine knowledge of morphology, morphosyntax, semantics, and pragmatics. Potentially, even textual register and genre may affect the choice of correct form. Hence, the task is both intrinsically interesting from a linguistic point of view and carries potential to support many downstream NLP applications.

TRACK 1:

The	___	are	barking
the/DT	dog	be/AUX+PRES+3PL	bark/V+V.PTCP

TRACK 2:

The ___ are barking.
dog

Figure 1: Test examples for tracks 1 and 2 in the cloze task. The objective is to inflect the target lemma `dog` in a contextually appropriate form, which in this case is `dogs`. Competitors observe context word forms, their lemmata and MSDs in track 1, whereas they only observe the context word forms in track 2.

As shown in Figure 1, both tracks supply the lemma of the omitted target word form and ask the competitors to inflect the lemma in a contextually appropriate way. In the first track, the competitors additionally see the lemmata and MSDs for all context words, whereas in the second track only the context words are available. In contrast to task 1, the MSD for the target lemma is never observed in either the first or the second track. This means that successful inflection requires the competitors to identify relevant contextual cues.

TRACK 1:

The	dogs	are	barking
the/DT	dog/N+PL	be/AUX+PRES+3PL	bark/V+V.PTCP

TRACK 2:

The dogs are barking.
dog

Figure 2: Training examples for tracks 1 and 2 in the cloze task. Track 1 supplies a full morphosyntactically annotated corpus as training data, whereas track 2 only supplies lemmata for a number of selected training tokens. Remaining tokens lack annotation altogether.

As training data, the first track supplies a full morphosyntactically annotated corpus of sentences:

every token is annotated with a lemma and MSD as shown in Figure 2. In the second track, the training data identifies a number of target tokens. Lemmata are supplied for these tokens but the remaining tokens receive no MSD annotation.

Similarly to task 1, both tracks in task 2 provide three different training data settings providing varying amounts of data: low (ca. 10^3 tokens), medium (ca. 10^4 tokens) and high (ca. 10^5 tokens). The token counts refer to the total number of tokens in the training sets. In the first track, this allows competitors to train their systems on all available tokens. In the second track, however, only a number of tokens supply the input lemma as explained above. Thus, the effective number of training examples is smaller in the second track than in the first track. In both tracks, competitors were restricted to using only the provided training sets. For example, semi-supervised training using external data was forbidden.

Key points:

1. The task is inflection in context. Given an input lemma in sentential context, participants generate the correct inflected output form.

2. Two degrees of supervision are provided. In track 1, participants see context word forms and their lemmata, as well as their MSDs. In track 2, participants only witness context word forms.

3. The supervised training data, the development data, and the test data consist of sampled sentences from Universal Dependencies (UD) treebanks (Nivre et al., 2017) together with UD-provided lemmata as well as MSDs, which were converted to the UniMorph format, in track 1.

3 Data

3.1 Data for Task 1

Languages The data for the shared task was highly multilingual, comprising 103 unique languages. Of these, 52 were shared with the 2017 shared task (Cotterell et al., 2017). As with all but 5 of the 2017 languages (Khaling, Kurmanji Kurdish, Sorani Kurdish, Haida, and Basque), the 34 remaining 2018 languages were sourced from the English edition of Wiktionary, a large multi-lingual crowd-sourced dictionary containing morphological paradigms for many lemmata.[3]

The shared task language set is genealogically diverse, including languages from ∼20 language stocks. Although the majority of the languages are Indo-European, we also include two language isolates (Haida and Basque) along with languages from Athabaskan (Navajo), Kartvelian (Georgian), Quechua, Semitic (Arabic, Hebrew), Sino-Tibetan (Khaling), Turkic (Turkish), and Uralic (Estonian, Finnish, Hungarian, and Northern Sami) language families. The shared task language set is also diverse in terms of morphological structure, with languages which use primarily prefixes (Navajo), suffixes (Quechua and Turkish), and a mix, with Spanish exhibiting internal vowel variations along with suffixes and Georgian using both infixes and suffixes. The language set also exhibits features such as templatic morphology (Arabic, Hebrew), vowel harmony (Turkish, Finnish, Hungarian), and consonant harmony (Navajo) which require systems to learn non-local alternations. Finally, the resource level of the languages in the shared task set varies greatly, from major world languages (e.g. Arabic, English, French, Spanish, Russian) to languages with few speakers (e.g. Haida, Khaling). Typologically, the majority of the languages are agglutinating or fusional, with three polysynthetic languages; Haida, Greenlandic, and Navajo.[4]

Data Format For each language, the basic data consists of triples of the form (lemma, feature bundle, inflected form), as in Table 1. The first feature in the bundle always specifies the core part of speech (e.g., verb).

All features in the bundle are coded according to the UniMorph Schema, a cross-linguistically consistent universal morphological feature set (Sylak-Glassman et al., 2015a,b).

Extraction from Wiktionary For each of the Wiktionary languages, Wiktionary provides a number of tables, each of which specifies the full inflectional paradigm for a particular lemma. These tables were extracted using a template annotation procedure described in (Kirov et al., 2018).

Within a language, different paradigms may have different shapes. To prepare the shared task data,

[3] https://en.wiktionary.org/ (08-2016 snapshot)

[4] Although, some linguists (Baker, 1996) would exclude Navajo from the polysynthetic languages due to its lack of noun incorporation.

each language's parsed tables from Wiktionary were grouped according to their tabular structure and number of cells. Each group represents a different type of paradigm (e.g., verb). We used only groups with a large number of lemmata, relative to the number of lemmata available for the language as a whole. For each group, we associated a feature bundle with each cell position in the table, by manually replacing the prose labels describing grammatical features (e.g. "accusative case") with UniMorph features (e.g. ACC). This allowed us to extract triples as described in the previous section. The dataset produced by this process was sampled to create appropriately-sized data for the shared task, as described in §3.1.[5] The dataset sizes by language are given in Table 2 and Table 3.

Sampling the Train-Dev-Test Splits. From each language's collection of paradigms, we sampled the training, development, and test sets as follows.[6]

Our first step was to construct probability distributions over the (lemma, feature bundle, inflected form) triples in our full dataset. For each triple, we counted how many tokens the inflected form has in the February 2017 dump of Wikipedia for that language. To distribute the counts of an observed form over all the triples that have this token as its form, we use the syncretism resolution method of Cotterell et al. (2018), training a neural network on unambiguous forms to estimate the distribution over all, even ambiguous, forms. We then sampled 12,000 triples without replacement from this distribution. The first 100 were taken as the low-resource training set for sub-task 1, the first 1,000 as the medium-resource training set, and the first 10,000 as the high-resource training set. Note that these training sets are nested, and that the highest-count triples tend to appear in the smaller training sets.

The final 2,000 triples were randomly shuffled and then split in half to obtain development and test sets of 1,000 forms each. The final shuffling was performed to ensure that the development set is similar to the test set. By contrast, the development and test sets tend to contain lower-count triples than the training set.[7] Note that for languages that do not have enough triples for this process, we settle for omitting the higher-resource training regimes and scale down the other sizes. Details for all languages are found in Tables 2 and 3.

3.2 Data for Task 2

All task 2 data sets are based on Universal Dependencies (UD) v2 treebanks (Nivre et al., 2017). We used the data sets aimed for the 2017 CoNLL shared task on Multilingual Dependency Parsing (Zeman et al., 2017) because those were available before the official UD v2 data sets.[8] For contextual inflection data sets, we retained only word forms, lemmata, part-of-speech tags and morphosyntactic feature descriptions. Dependency trees were discarded along with all other annotations present in the treebanks.

Task 2 submissions are evaluated with regard to two distinct criteria: (1) the ability of the system to reconstruct the *original* word form in the UD test set and (2) the ability of the system to find a *contextually plausible* form even if the form differs from the original one. Evaluation on plausible forms is based on manually identifying the set of contextually plausible forms for each test example. Because of the need for manual annotation, task 2 covers a more limited set of languages than task 1. In total, there are seven languages: English, Finnish, French, German, Russian, Spanish and Swedish. Token counts for the training, development and test sets are given in Table 4.

Data Conversion Some of the UD treebanks required slight modifications in order to be suitable for reinflection. In the Finnish data sets, lemmata for compound words included morpheme boundaries, for example `muisti#kapasiteetti` 'memory capacity'. The morpheme boundary symbols were deleted. In the Russian treebanks, all lemmata were written completely in upper case letters. These were converted to lower case.[9]

[5] Full, unsampled Wiktionary parses are made available at `unimorph.org` on a rolling basis.

[6] These datasets can be obtained from `https://sigmorphon.github.io/sharedtasks/2018/`

[7] This is a realistic setting, since supervised training is usually employed to generalize from frequent words that appear in annotated resources to less frequent words that do not. Unsupervised learning methods also tend to generalize from more frequent words (which can be analyzed more easily by combining information from many contexts) to less frequent ones.

[8] The German 2017 CoNLL UD shared task data set is problematic: (1) there are many sentence fragments, (2) some words have complete MSDs while others are lacking MSD altogether. Therefore, we eventually decided to use the official v2 UD data sets for the German test data. These problems are not present in the official UD distribution.

[9] We used the Python3 function `string.lower`.

Language	Family	Lemmata / Forms	High	Medium	Low	Dev	Test
Adyghe	Caucasian	1666 / 20475	1664/10000	760/1000	99/100	763/1000	749/1000
Albanian	Indo-European	589 / 33483	588/10000	375/1000	84/100	377/1000	373/1000
Arabic	Semitic	4134 / 140003	3204/10000	832/1000	99/100	807/1000	813/1000
Armenian	Indo-European	7033 / 338750	4658/10000	903/1000	98/100	880/1000	900/1000
Asturian	Romance	436 / 29797	432/10000	361/1000	90/100	368/1000	365/1000
Azeri	Iranian	340 / 8004	340/6488	290/1000	79/100	73/100	81/100
Bashkir	Turkic	1084 / 12168	1084/10000	662/1000	94/100	657/1000	651/1000
Basque	Isolate	45 / 12663	45/10000	42/1000	24/100	41/1000	43/1000
Belarusian	Slavic	1027 / 16113	1027/10000	616/1000	98/100	628/1000	630/1000
Bengali	Indo-Aryan	136 / 4443	136/4243	134/1000	65/100	65/100	68/100
Breton	Celtic	44 / 2294	44/1983	44/1000	40/100	38/100	39/100
Bulgarian	Slavic	2468 / 55730	2133/10000	716/1000	98/100	742/1000	744/1000
Catalan	Romance	1547 / 81576	1545/10000	746/1000	95/100	738/1000	738/1000
Classical-Syriac	Semitic	160 / 3652	160/2396	160/1000	74/100	70/100	73/100
Cornish	Celtic	9 / 469	—	9/346	9/100	9/50	9/50
Crimean-Tatar	Turkic	1230 / 7514	1230/7314	704/1000	94/100	95/100	95/100
Czech	Slavic	5125 / 134527	3908/10000	848/1000	97/100	848/1000	849/1000
Danish	Germanic	3193 / 25508	3137/10000	877/1000	100/100	866/1000	853/1000
Dutch	Germanic	4993 / 55467	4161/10000	913/1000	100/100	898/1000	894/1000
English	Germanic	22765 / 120004	8367/10000	989/1000	100/100	985/1000	984/1000
Estonian	Uralic	886 / 38215	886/10000	587/1000	94/100	553/1000	577/1000
Faroese	Germanic	3077 / 45474	2959/10000	857/1000	99/100	852/1000	865/1000
Finnish	Uralic	57642 / 2490377	8643/10000	985/1000	100/100	983/1000	987/1000
French	Romance	7535 / 367732	5592/10000	936/1000	98/100	948/1000	941/1000
Friulian	Romance	168 / 8071	168/7871	168/1000	76/100	79/100	79/100
Galician	Romance	486 / 36801	486/10000	421/1000	91/100	421/1000	423/1000
Georgian	Kartvelian	3782 / 74412	3537/10000	861/1000	100/100	872/1000	874/1000
German	Germanic	15060 / 179339	6797/10000	961/1000	100/100	945/1000	962/1000
Greek	Hellenic	10581 / 186663	5130/10000	897/1000	98/100	915/1000	908/1000
Greenlandic	Inuit	23 / 368	—	23/268	23/100	21/50	21/50
Haida	Isolate	41 / 7040	41/6840	41/1000	40/100	34/100	38/100
Hebrew	Semitic	510 / 13818	510/10000	470/1000	95/100	431/1000	453/1000
Hindi	Indo-Aryan	258 / 54438	258/10000	252/1000	85/100	254/1000	255/1000
Hungarian	Uralic	13989 / 503042	7123/10000	963/1000	100/100	973/1000	978/1000
Icelandic	Germanic	4775 / 76945	4115/10000	894/1000	100/100	898/1000	906/1000
Ingrian	Uralic	50 / 1099	—	50/999	45/100	30/50	31/50
Irish	Celtic	7464 / 107298	5040/10000	906/1000	99/100	913/1000	893/1000
Italian	Romance	10009 / 509574	6389/10000	948/1000	100/100	942/1000	944/1000
Kabardian	Caucasian	250 / 3092	250/2892	246/1000	81/100	82/100	81/100
Kannada	Dravidian	159 / 6402	159/4383	147/1000	54/100	53/100	59/100
Karelian	Uralic	20 / 682	—	20/582	20/100	17/50	18/50
Kashubian	Slavic	37 / 509	—	37/402	34/100	27/50	28/50
Kazakh	Turkic	26 / 357	—	26/257	26/100	22/50	25/50
Khakas	Turkic	75 / 1200	—	52/732	44/100	31/50	32/50
Khaling	Sino-TIbetan	591 / 156097	584/10000	426/1000	92/100	411/1000	422/1000
Kurmanji	Iranian	15083 / 216370	7046/10000	945/1000	100/100	949/1000	958/1000
Ladin	Romance	180 / 7656	180/7456	179/1000	80/100	81/100	75/100
Latin	Romance	17214 / 509182	6517/10000	943/1000	100/100	939/1000	945/1000

Table 2: Total number of lemmata and forms available for sampling, and number of distinct lemmata and forms present in each data condition in Task 1. Data permitting, there were 10000,1000, and 100 forms in the High, Medium, and Low conditions, respectively, and 1000 forms in each Dev and Test set.

Language	Family	Lemmata / Forms	High	Medium	Low	Dev	Test
Latvian	Baltic	7548 / 136998	5268/10000	930/1000	99/100	922/1000	923/1000
Lithuanian	Baltic	1458 / 34130	1443/10000	632/1000	96/100	664/1000	639/1000
Livonian	Uralic	203 / 3987	203/3787	203/1000	71/100	70/100	70/100
Lower-Sorbian	Slavic	994 / 20121	993/10000	616/1000	96/100	621/1000	631/1000
Macedonian	Slavic	10313 / 168057	6107/10000	951/1000	99/100	943/1000	956/1000
Maltese	Semitic	112 / 3584	112/1560	112/1000	68/100	71/100	69/100
Mapudungun	Araucanian	26 / 783	—	26/602	26/100	22/50	23/50
Middle-French	Romance	603 / 36970	603/10000	480/1000	92/100	491/1000	505/1000
Middle-High-German	Germanic	29 / 708	—	29/594	27/100	19/50	22/50
Middle-Low-German	Germanic	52 / 1513	—	52/988	43/100	30/50	34/50
Murrinhpatha	Australian	29 / 1110	—	29/973	28/100	24/50	24/50
Navajo	Athabaskan	674 / 12354	674/10000	489/1000	92/100	491/1000	494/1000
Neapolitan	Romance	40 / 1808	40/1568	40/1000	36/100	38/100	37/100
Norman	Romance	5 / 280	—	5/180	5/100	5/50	5/50
North-Frisian	Germanic	51 / 3204	51/2256	51/1000	42/100	43/100	44/100
Northern-Sami	Uralic	2103 / 62677	1977/10000	750/1000	97/100	717/1000	730/1000
Norwegian-Bokmaal	Germanic	5527 / 19238	5041/10000	925/1000	100/100	928/1000	930/1000
Norwegian-Nynorsk	Germanic	4689 / 16563	4420/10000	922/1000	99/100	903/1000	912/1000
Occitan	Romance	174 / 8316	174/8116	173/1000	76/100	81/100	75/100
Old-Armenian	Indo-European	4300 / 93085	3413/10000	837/1000	100/100	802/1000	822/1000
Old-Church-Slavonic	Slavic	152 / 4148	152/2961	151/1000	78/100	70/100	76/100
Old-English	Germanic	1867 / 42425	1795/10000	688/1000	96/100	708/1000	701/1000
Old-French	Romance	1700 / 123374	1666/10000	745/1000	96/100	769/1000	722/1000
Old-Irish	Celtic	49 / 1078	—	49/851	38/100	27/50	26/50
Old-Saxon	Germanic	863 / 22287	861/10000	514/1000	85/100	535/1000	494/1000
Pashto	Iranian	395 / 6945	395/6340	289/1000	82/100	77/100	78/100
Persian	Iranian	273 / 37128	273/10000	269/1000	82/100	268/1000	267/1000
Polish	Slavic	10185 / 201024	5922/10000	935/1000	99/100	938/1000	942/1000
Portuguese	Romance	4001 / 305961	3657/10000	905/1000	98/100	868/1000	865/1000
Quechua	Quechuan	1006 / 180004	957/10000	515/1000	91/100	492/1000	506/1000
Romanian	Romance	4405 / 80266	3351/10000	858/1000	99/100	854/1000	828/1000
Russian	Slavic	28068 / 473481	8241/10000	973/1000	100/100	985/1000	977/1000
Sanskrit	Indo-Aryan	917 / 33847	917/10000	548/1000	91/100	585/1000	558/1000
Scottish-Gaelic	Celtic	73 / 781	—	73/681	57/100	36/50	39/50
Serbo-Croatian	Slavic	24419 / 840799	6726/10000	963/1000	99/100	965/1000	945/1000
Slovak	Slavic	1046 / 14796	1046/10000	625/1000	95/100	590/1000	633/1000
Slovene	Slavic	2535 / 60110	2368/10000	757/1000	99/100	760/1000	793/1000
Sorani	Iranian	274 / 22990	263/10000	197/1000	74/100	198/1000	199/1000
Spanish	Romance	5460 / 383390	4621/10000	906/1000	99/100	902/1000	922/1000
Swahili	Bantu	100 / 10092	100/8800	88/1000	49/100	50/100	42/100
Swedish	Germanic	10552 / 78407	6508/10000	952/1000	100/100	954/1000	970/1000
Tatar	Turkic	1283 / 7832	1283/7632	736/1000	98/100	95/100	95/100
Telugu	Dravidian	127 / 1548	—	—	18/61	16/50	16/50
Tibetan	Sino-Tibetan	65 / 353	—	63/158	56/100	38/50	38/50
Turkish	Turkic	3579 / 275460	2876/10000	821/1000	98/100	849/1000	840/1000
Turkmen	Turkic	68 / 810	—	68/710	51/100	35/50	35/50
Ukrainian	Slavic	1493 / 20904	1491/10000	722/1000	99/100	745/1000	736/1000
Urdu	Indo-Aryan	182 / 12572	182/10000	113/1000	53/100	105/1000	107/1000
Uzbek	Turkic	15 / 1260	15/1060	15/1000	15/100	15/100	15/100
Venetian	Romance	368 / 18227	368/10000	339/1000	88/100	341/1000	340/1000
Votic	Uralic	55 / 1430	55/1230	55/1000	50/100	48/100	47/100
Welsh	Celtic	183 / 10641	183/10000	181/1000	78/100	76/100	80/100
West-Frisian	Germanic	85 / 1429	85/1078	85/1000	53/100	62/100	61/100
Yiddish	Germanic	803 / 7986	803/7356	581/1000	96/100	90/100	93/100
Zulu	Bantu	566 / 39607	566/10000	450/1000	90/100	449/1000	443/1000

Table 3: Total number of lemmata and forms available for sampling, and number of distinct lemmata and forms present in each data condition in Task 1. Data permitting, there were 10000,1000, and 100 forms in the High, Medium, and Low conditions, respectively, and 1000 forms in each Dev and Test set.

Language	Train			Dev	Test
	low	medium	high		
English	1,009	10,016	100,031	22,509	22,765
Finnish	1,001	10,009	100,003	16,543	15,452
French	1,016	10,004	100,001	28,304	14,992
German	1,005	10,001	79,439	3,752	22,903
Russian	1,003	10,020	75,964	11,292	27,935
Spanish	1,017	10,035	100,000	35,209	27,807
Swedish	1,007	10,009	66,645	7,999	20,808

Table 4: Token counts of the training, development and test sets for task 2.

Language	Dev	Test
English	2,489	993
Finnish	1,881	787
French	1,655	491
German	333	989
Russian	1,181	996
Spanish	2,268	713
Swedish	573	940

Table 5: Counts of target lemmata to be inflected in the development and test sets for task 2.

Manual annotation To produce the complete list of "plausible forms" annotators were given complete UniMorph inflection tables for the center lemma for each sentence and were asked to check off all forms that are "grammatically plausible" in the particular context. For example, given an original sentence **We saw the dog**, the form **dogs** would be contextually plausible and would be annotated into the test set. For pro-drop languages and short sentences, it is sometimes the case that all or most indicative, conditional, and future forms of a verb are acceptable when the subject is omitted and agreement is unknown. For example, consider the Spanish sentence from the test data:

___	la	mejor	de	Primera
ser				
'**to be**'	'the'	'best'	'of'	'premier (league)'

Obviously, almost any person, tense, and aspect of the verb 'to be' will be appropriate for this limited context (`sería` 'I would be', `fue` 'he/she/it was', `eres` 'you are', ...). Of course, depending on the genre of the text, some would be highly implausible, but the annotation intends to capture morphosyntactic rather than semantic and pragmatic felicity.

We had one annotator for each test set, with the exception of French, in which, due to practical difficulties in finding a native speaker annotator, we did not annotate the plausible forms and instead used the original sentences.

When forming the final test sets, all test examples with more than 5 contextually plausible word form alternatives were filtered out. This was done because a large number of plausible word forms was deemed to raise the risk of annotation errors. A threshold of 5 plausible forms was chosen because it means that all languages have test sets greater than 700 examples. The test set for French is smaller but this is not due to manual annotations.

UD:

So	what	happened	?
ADV	PRON	VERB Mood=Ind Tense=Past VerbForm=Fin	PUNCT

UniMorph:

So	what	happened	?
ADV	PRO	V IND PST FIN	PUNCT

Figure 3: A morphosyntactically annotated sentence from the original UD treebank for English and the result of an automatic conversion into the UniMorph annotation schema.

Sampling examples The data sets for each language are based on UD treebanks for the given language. We preserved UD splits into training, development and test data.

For each UD treebank, we first formed sets of training, development and test candidate sentences. A sentence was a candidate for the shared task data set if it contained a token found in the UniMorph resource for the relevant language; or more precisely, a token whose word form, lemma and MSD occur in a same UniMorph inflection table.

We limited target tokens to tokens present in the UniMorph resource in order to facilitate manual annotation of data sets. In particular, we limited the set of possible target MSDs to MSDs which occur in the Unimorph resource. This was necessary to avoid a prohibitively large number of contextually plausible inflections in certain languages. For example, Finnish includes a number of clitics (`ko/kä`, `kin`, `han/hän`, `pa/pä`, `s`, `kaan/kään`) which can be appended relatively freely to word forms. Combinations of clitics are also possible. This easily leads to hundreds of word forms which can be contextually plausible.

Restricting the MSDs of a possible output form to the more limited set of MSDs occurring in the UniMorph resource made the selection of plausible forms far more manageable from an annotation perspective.

Training data sets were formed from candidate sentences simply by sampling a suitable number of sentences from the candidate sets in order to achieve the desired token counts 10^3, 10^4, and 10^5 for the low, medium, and high data settings, respectively. For German and Russian, all candidate sentences were used in the high data setting, although this was not sufficient to create a training set of 10^4 tokens. The training sets for German and Russian are, therefore, smaller than those for the other languages. For the development sets, we used all available candidate sentences for all of the languages.

For the test data, we first formed a set of candidate sentences so that the combined number of target tokens in the test sets was 1,000.[10] Target tokens in these initial test sets were then manually annotated with additional contextually plausible word forms.

MSD conversion Sampling of training, development and test examples was based on comparing UD word forms, lemmata and MSDs to equivalents in UniMorph paradigms. Therefore, it was necessary to convert the morphosyntactic annotation in the UD data sets into UniMorph morphosyntactic annotation. We used deterministic tag conversion rules to accomplish this. An example of a source UD sentence and a target UniMorph sentence is shown in Figure 3.

Since the selection of languages in task 2 is small and we do not attempt to correct annotation errors in the UD source materials, conversion between UD and UniMorph morphosyntactic descriptions is generally straightforward.[11] However, UD descriptions are more fine-grained than their UniMorph equivalents. For example, UD denotes lexical features such as noun gender which are inherent features of a lexeme possessed by all of its word forms. Such inherent features are missing from UniMorph which exclusively annotates inflectional morphology (McCarthy et al., 2018). Therefore, UD features which lack correspondents in the UniMorph tagging schema were simply dropped during conversion.

[10] For French, there were only 491 target tokens in the entire UD test data set. Those were used as the test data.

[11] McCarthy et al. (2018) present more principled and far more complete work on conversion between the UD and UniMorph resources for the full range of languages at the intersection of UD and UniMorph resources.

4 Baselines

4.1 Task 1 Baseline

The baseline system provided for task 1 was based on the observation that, for a large number of languages, producing an inflected form from an input citation form can often be done by memorizing the suffix changes that occur in doing so, assuming enough examples are seen (Liu and Mao, 2016). For example, in witnessing a Finnish inflection of the noun `koti` 'home' in the singular elative case as `kodista`, a number of transformation rules can be extracted that may apply to previously unseen nouns:

```
$koti$
$kodista$   N;IN+ABL;SG
```

In this example, the following transformation rules are extracted:

```
$ → sta$          i$ → ista$
ti$ → dista$      oti$ → odista$
koti$ → kodista$
```

Such rules are then extracted from each example inflection in the training data. At generation time, the longest matching left hand side of a rule is identified and applied to the citation form. For example, if the Finnish noun `luoti` 'bullet' were to be inflected in the elative (N;IN+ABL;SG) using only the extracted rules given above, the transformation `oti$ → odista$` would be triggered, producing the output `luodista`. In case there are multiple candidate rules of equally long left hand sides that all match, ties are broken by frequency—i.e. the rule that has been witnessed most times in the training data applies.

Since languages may also use prefixing as a inflectional strategy, a similar process is applied to any identified prefix changes. Identifying which parts of a change in a word form correspond to a prefix and which are considered suffixes requires alignment of the citation form and the output form, which is performed as a preliminary step. We refer the reader to Cotterell et al. (2017) for a detailed description of the baseline system.

4.2 Task 2 Baseline

Neural Baseline The neural baseline system is an encoder-decoder reinflection system with attention inspired by Kann and Schütze (2016). The crucial difference is that the reinflection is conditioned on sentence context. This is accomplished by conditioning the encoder on embeddings of context words in track 2 and context words, their lemmata and their MSDs in track 1.

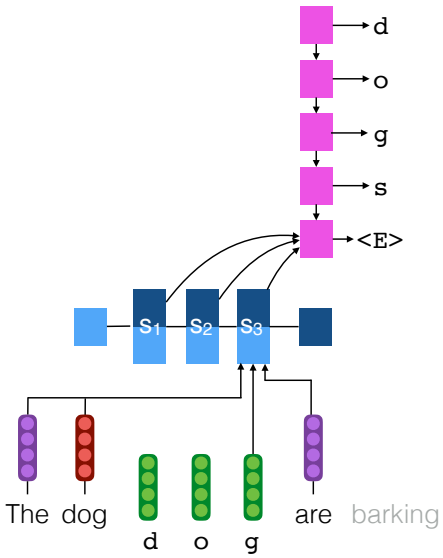

Figure 4: The neural baseline system for track 2 of task 2: A bidirectional LSTM encoder, conditioned on embeddings of the left context word **The**, right context word **are** and a whole token embedding of the lemma **dog**, is used to encode the character sequence (**d**, **o**, **g**) into representation vectors s_1, s_2 and s_3. An LSTM decoder with an attention mechanism generates the contextually appropriate output word form **dogs**. The neural baseline system for track 1 is very similar but the encoder is conditioned on embeddings of the context words, context lemmata and context MSDs.

The neural baseline system takes as input

1. A lemma $l = l_1, ..., l_m$,
2. a left and right context word form w_L and w_R, respectively.
3. a left and right context lemma l_L and l_R, respectively (only in track 1) and
4. a left and right context MSD m_L and m_R, respectively (only in track 1).

The neural baseline system produces an inflected form $w = w_1, ..., w_n$ of the lemma as output.

The input characters l_i are first embedded: $l_i \mapsto \mathrm{E}(l_i)$. Then, context words ($w_\mathrm{L}$ and w_R) for both tracks, as well as context lemmata (l_L and l_R) and MSDs (m_L and m_R) for track 1 are also embedded: $w_X \mapsto \mathrm{E}(w_X)$, $l_X \mapsto \mathrm{E}(l_X)$ and $m_X \mapsto \mathrm{E}(m_X)$. The system also a uses the whole token embedding of the input lemma l: $l \mapsto \mathrm{E}(l)$.

A bidirectional LSTM encoder is used to encode the lemma into representation vectors. In order to condition the encoder on the sentence context of the lemma, the encoder input vector e_i for character l_i is

1. a concatenation of embeddings for the context word forms, context lemmata, context MSDs, input lemma and input character: $e_i = [\mathrm{E}(w_\mathrm{L}); \mathrm{E}(l_\mathrm{L}); \mathrm{E}(m_\mathrm{L}); \mathrm{E}(l); \mathrm{E}(w_\mathrm{R}); \mathrm{E}(l_\mathrm{R}); \mathrm{E}(m_\mathrm{R}); \mathrm{E}(l_i)]$ for track 1, and
2. a concatenation of embeddings for the context word forms, input lemma and input character: $e_i = [\mathrm{E}(w_\mathrm{L}); \mathrm{E}(l); \mathrm{E}(w_\mathrm{R}); \mathrm{E}(l_i)]$ for track 2.

The input vectors $e_1, ..., e_m$ are then encoded into representations $s_1, ..., s_m$ by a bidirectional LSTM encoder. Finally, a decoder with additive attention (Vaswani et al., 2017) is used for generating the output word form $w = w_1, ..., w_n$ based on the representations $s_1, ..., s_m$.

The baseline system uses 100-dimensional embeddings and the LSTM hidden dimension for both the encoder and decoder is of size 100. Both encoder and decoder LSTM networks are single layer networks. The additive attention network is a 2-layer feed-forward network with hidden dimension 100 and $\tanh$ nonlinearity.

The baseline system is trained for 20 epochs in both tracks and under all data settings using Adam (Kingma and Ba, 2014). During training, 30% dropout is applied on all input and recurrent connections in the encoder and decoder LSTM networks. Whole token embeddings for the input lemma, context word forms, lemmata and MSDs are dropped with a probability of 10%.

Copy Baseline The second baseline is very straightforward. It simply copies the input lemma into the output. The system is based on the observation that in many languages the lemma form is quite common. In some languages, such as English, this baseline is in fact quite difficult to beat when the training set is small.

5 Results

The CoNLL–SIGMORPHON 2018 shared task received submissions from 15 teams with members from 17 universities or institutes (Table 7). Many

	predict MSD	subword context	context RNN	context attention	multilingual	beam search
BME-HAS (Ács, 2018)	–	✓	✓	–	–	–
COPENHAGEN (Kementchedjhieva et al., 2018)	✓	–	✓	–	✓	–
CUBoulder (Liu et al., 2018)	✓	–	–	–	–	–
NYU (Kann et al., 2018)	–	✓	✓	✓	–	–
UZH (Makarov and Clematide, 2018)	–	✓	–	–	–	✓

Table 6: Features of Task 2 systems.

of the teams submitted more than one system, yielding a total of 33 unique systems entered—27 for task 1, and 6 for task 2. In addition, baseline systems provided by the organizers for both tasks were also evaluated.

5.1 Task 1 Results

The relative system performance is described in Table 8, which show the average per-language accuracy of each system by resource condition. The table reflects the fact that some teams submitted more than one system (e.g. UZH-1 & UZH-2 in the table). Learning curves for each language across conditions are shown in Tables 9 and 10, which indicates the best per-form accuracy achieved by a submitted system. Full results can be found in Appendix A. Newer approaches led to better overall results in 2018 compared to 2017. In the low-resource condition, 41 (80%) of the 52 languages shared across years saw improvement in top system performance.

In the lower data conditions, encoder-decoder models are known to perform worse than the baseline model due to data sparsity. One way to work around this weakness is to learn sequences of edit operations instead of a standard string-to-string transduction, a strategy which was used by teams last year and this year (AX SEMANTICS, UZH, HAMBURG, MSU, RACAI). Another strategy is to create artificial training data that biases the neural model toward copying (Kann and Schütze, 2017; Bergmanis et al., 2017; Silfverberg et al., 2017; Zhou and Neubig, 2017; Nicolai et al., 2017), which was also employed this year (TUEBINGEN-OSLO, WASEDA). Learning edit sequences requires input/output alignment, often as a preliminary step. The UZH submissions, which attained the highest average accuracy on the higher data conditions, built upon ideas in their last year's submission (Makarov et al., 2017), which had used such a separate alignment step followed by the application of an edit sequence. Their 2018 submission included edit distance alignment as part of the training loss function in the model, producing an end-to-end model. Another alternative to the edit sequence model is to use pointer generator networks, introduced by (See et al., 2017) for text summarization, which also allow for copying parts of the input. This was employed by IITBHU. BME used a modified attention model that attended to both the lemma sequence and the tag sequence, which worked well in the high data condition, but, being without models of data augmentation or edit sequences, it suffered in the low data setting. In general, systems that included edit sequence generation or data augmentation fared significantly better in the low data settings. The HAMBURG submission attempted to learn similarities between characters based on rendering them visually using a font, with the intent to discover similarities such as those between **a** and **ä**, where the former is usually a low back vowel, and the latter a fronted version. Ensembling was also a popular choice to improve system performance. The UA system combined multiple models, both neural and non-neural, and focused on performance in the low data setting.

Even though the top-ranked systems used some form of ensembling to improve performance, different teams relied on different overall approaches. As a result, submissions may contain some amount of complementary information, so that a global ensemble may improve accuracy. As in 2017, we present an upper bound on the possible performance of such an ensemble. Table 8 includes an "Ensemble Oracle" system (oracle-e) that gives the correct answer if *any* of the submitted systems is correct. The oracle performs significantly better than any one system in both the Medium ($\sim$10%) and Low ($\sim$25%) conditions. This suggests that the different strategies used by teams to "bias" their systems in an effort to make up for sparse data lead to substantially different generalization patterns.

As in 2017, we also present a second "Feature Combination" Oracle (oracle-fc) that gives the correct answer for a given test triple iff its feature bundle appeared in training (with any lemma). Thus, oracle-fc provides an upper bound on the performance of systems that treat a feature bundle such

Team	Institute(s)	System Description Paper
AXSEMANTICS[1]	AX Semantics	Madsack et al. (2018)
BME[1]/BME-HAS[2]	Budapest University of Technology and Economics / Hungarian Academy of Sciences	Ács (2018)
COPENHAGEN[2]	University of Copenhagen	Kementchedjhieva et al. (2018)
CUBoulder[2]	University of Colorado, Boulder	Liu et al. (2018)
HAMBURG[1]	Universität Hamburg	Schröder et al. (2018)
IITBHU[1]	IIT (BHU) Varanasi / IIIT Hyderabad	Sharma et al. (2018)
IIT-VARANASI[1]	Indian Institute of Technology (BHU) Varanasi	Jain and Singh (2018)
KUCST[1]	University of Copenhagen, Centre for Language Technology	Agirrezabal (2018)
MSU[1]	Moscow State University	Sorokin (2018)
NYU[2]	New York University	Kann et al. (2018)
RACAI[1]	Romanian Academy	Dumitrescu and Boros (2018)
TUEBINGEN-OSLO[1]	University of Oslo / University of Tübingen	Rama and Çöltekin (2018)
UA[1]	University of Alberta	Najafi et al. (2018)
UZH[1,2]	University of Zurich	Makarov and Clematide (2018)
WASEDA[1]	Waseda University	Fam and Lepage (2018)

Table 7: Participating teams, member institutes, and the corresponding system description papers. In the results and the main text, team submissions have an additional integer index to distinguish between multiple submissions by one team. The numbers at each abbreviated team name show whether teams participated in task 1, task 2, or both.

as V;SBJV;FUT;3;PL as atomic. In the low-data condition, this upper bound was 77%, meaning that 23% of the test bundles had never been seen in training data. Nonetheless, systems should be able to make some accurate predictions on this 23% by decomposing each test bundle into individual morphological features such as FUT (future) and PL (plural), and generalizing from training examples that involve those features. For example, a particular feature or sub-bundle might be realized as a particular affix. For systems to succeed at this type of generalization, they must treat each individual feature separately, rather than treating feature bundles as holistic. In the medium data condition for some languages, some submissions far surpassed oracle-fc. As in 2017, the most notable example of this is Basque, where oracle-fc produced a 44% accuracy while six of the submitted systems produced an accuracy of 80% or above. Basque is an extreme example with very large paradigms for the few verbs that inflect in the language, so the problem of generalizing correctly to unseen feature combinations is amplified.

5.2 Task 2 Results

All systems submitted for task 2 were neural systems. All but one of the systems were encoder-decoder systems reminiscent of Kann and Schütze (2016). The exception, Makarov and Clematide (2018), used a neural transition-based transducer with a designated copy action, which edits the input lemma into an output form. Table 6 details some of the design features in task 2 systems.

Predict MSD systems predicted the MSD of the target word form based on contextual cues and used the MSD to improve performance. The system by Kementchedjhieva et al. (2018) used MSD prediction as an auxiliary task. The system by Liu et al. (2018) instead converted the contextual reinflection problem into ordinary morphological reinflection. They first predicted the MSD of the target word form based on sentence context and then generated the target word form using the input lemma and the predicted MSD.

Several systems improved upon the context model in the neural baseline system. Three systems (BME-HAS, NYU, and ZHU) used *subword context* models, for example, character-level models to encode context word forms, lemmata and MSDs. Many systems (Ács, 2018; Kementchedjhieva et al., 2018; Kann et al., 2018) also used a *context RNN* for encoding sentence context exceeding the immediate neighboring words. Kann et al. (2018) used *context attention* which refers to an attention mechanisms directed at contextual information.

The system by Kementchedjhieva et al. (2018) was *multilingual* in the sense that it combined training data for all task 2 languages. Finally, the system by Makarov and Clematide (2018) used *beam search* for decoding.

Overall performance for all data settings in tracks 1 and 2 of task 2 is described in Table 11. For evaluation with regard to original forms, the evaluation criterion is accuracy; that is, how often a system correctly predicted the original UD form. For evaluation with regard to plausible forms, the evaluation criterion is relaxed accuracy given the set of contextually plausible forms. In other words, we measure how often the prediction was one of the variants in the set of plausible forms.

In track 1, the COPENHAGEN system is the

	High	Medium	Low
uzh-01	**96.00 / 0.08**	**86.64 / 0.26**	57.18 / 1.00
uzh-02	95.97 / 0.08	86.38 / 0.27	**57.21 / 1.02**
bme-02	94.66 / 0.11	67.26 / 0.88	2.43 / 6.91
iitbhu-iiith-01	94.43 / 0.11	82.90 / 0.34	49.79 / 1.18
iitbhu-iiith-02	94.43 / 0.11	84.19 / 0.32	52.60 / 1.10
bme-03	93.97 / 0.12	67.36 / 0.75	3.63 / 6.75
bme-01	93.88 / 0.12	67.43 / 0.75	3.74 / 6.72
msu-04	91.87 / 0.23	76.40 / 0.55	31.40 / 2.16
iit-varanasi-01	91.73 / 0.16	70.17 / 0.66	23.33 / 2.40
waseda-01	91.12 / 0.19	77.38 / 0.67	44.09 / 1.68
msu-03	90.52 / 0.25	75.74 / 0.55	25.86 / 2.38
axsemantics-01	84.19 / 0.40	*58.00 / 1.10*	*72.00 / 0.96*
msu-02	82.68 / 0.41	69.45 / 0.79	41.61 / 1.86
racai-01	*79.93 / 0.43*	— / —	— / —
hamburg-01	77.53 / 0.44	74.03 / 0.54	40.28 / 1.45
axsemantics-02	74.77 / 0.68	60.00 / 1.03	*14.89 / 3.89*
msu-01	74.33 / 0.78	*64.57 / 0.93*	— / —
tuebingen-oslo-03	63.05 / 1.15	30.98 / 2.25	1.39 / 5.70
tuebingen-oslo-02	56.60 / 1.34	29.72 / 2.36	4.43 / 5.06
kucst-01	*54.37 / 1.57*	*32.28 / 2.23*	*2.79 / 5.28*
tuebingen-oslo-01	49.52 / 1.67	20.97 / 2.81	0.00 / 7.94
ua-08	— / —	— / —	53.22 / 1.35
ua-05	— / —	— / —	50.53 / 1.34
ua-06	— / —	— / —	49.73 / 1.46
ua-03	— / —	— / —	44.82 / 1.45
ua-02	— / —	— / —	*41.61 / 2.47*
ua-07	— / —	— / —	*39.52 / 1.76*
ua-01	— / —	— / —	38.22 / 2.02
ua-04	— / —	— / —	21.25 / 3.43
baseline	77.42 / 0.51	63.53 / 0.90	38.89 / 1.88
oracle-fc	99.87 / –	98.27 / –	77.23 / –
oracle-e	98.90 / –	93.74 / –	74.88 / –

Table 8: Task 1 results: Per-form accuracy (in percentage points) and average Levenshtein distance from the correct form (in characters), averaged across the 103 languages with all languages weighted equally. The columns represent the different training size conditions. Rows are sorted by accuracy under the "High" condition. Numbers in bold are the best accuracy in their category. Greyed-out cells represent partial submissions that did not provide output for every language, and thus do not have comparable mean scores. The per-language performance of these systems can be found in the Appendix.

clear winner in the high and medium data settings, whereas the UZH system is the clear winner in the low data setting. In fact, UZH is the only system which can beat the lemma copying baseline COPY-BL in the low setting. In track 2, the COPENHAGEN system and the neural baseline system NEURAL-BL deliver comparable performance in the high data setting. In the medium and low setting, the UZH system is the clear winner. Once again, the UZH system is the only system which can beat the lemma copying baseline COPY-BL in the low setting.

Table 11 shows that the best track 1 system outperforms the best track 2 system for every data setting, meaning that the additional supervision offered by context lemmata and MSDs is useful. Moreover, this effect seems to strengthen with increasing amounts of training data: the difference in performance between the best track 1 and track 2 systems for original forms in the low data setting is 3.8%-points, in the medium setting 7.8%-points, and in the high setting 13.6%-points. A further observation is that it seems to be more difficult to deliver improvements over the neural baseline system NEURAL-BL in the high setting in track 2, where NEURAL-BL in fact is one of the top two systems. This may be a result of the relatively small training sets: even in the high data setting, the training sets only contain approximately 10^5 tokens.

The results on original and plausible forms show strong agreement. In all but one case, the same systems deliver the strongest performance for both evaluation criteria. The only exception is the Track 2 high setting where COPENHAGEN is the top system with regard to original forms and NEURAL-BL with regard to plausible forms. However, the performance of these systems is very similar. This strong agreement indicates that evaluation on plausible forms might not be necessary.

The best-performing systems for each language, track, and data setting in task 2 are given in Table 12. In track 1, COPENHAGEN achieves the strongest results for most languages in the high and medium data settings, whereas UZH delivers the best performance on all languages in the low setting. In track 2, COPENHAGEN and NEURAL-BL deliver the best performance on an equal number of languages in the high setting, whereas UZH delivers best performance for most languages in the low and medium settings, and COPENHAGEN performs best for the remaining languages.

6 Future Directions

In the case of inflection an interesting future topic could involve departing from orthographic representation and using more IPA-like representations, i.e. transductions over pronunciations. Different languages, in particular those with idiosyncratic orthographies, may offer new challenges in this respect.[12]

Neither task this year included unannotated monolingual corpora. Using such data is well-motivated from an L1-learning point of view, and

[12] Although some recent research suggests that working with IPA or phonological distinctive features in this context yields very similar results to working with graphemes (Wiemerslage et al., 2018).

	Task 1 - Part 1		
	High	Medium	Low
Adyghe	100.00(uzh-2)	94.40(uzh-1)	90.60(ua-8)
Albanian	98.90(bme-2)	88.80(iitbhu-iiith-2)	36.40(uzh-1)
Arabic	93.70(uzh-1)	79.40(uzh-1)	45.20(uzh-1)
Armenian	96.90(bme-2)	92.80(uzh-1)	64.90(uzh-1)
Asturian	98.70(uzh-1)	92.40(iitbhu-iiith-2)	74.60(uzh-2)
Azeri	100.00(axsemantics-2)	96.00(iitbhu-iiith-2)	65.00(iitbhu-iiith-2)
Bashkir	99.90(uzh-2)	97.30(uzh-2)	77.80(iitbhu-iiith-1)
Basque	98.90(bme-2)	88.10(iitbhu-iiith-2)	13.30(uzh-1)
Belarusian	94.90(uzh-1)	70.40(uzh-1)	33.40(ua-8)
Bengali	99.00(bme-3)	99.00(uzh-2)	72.00(uzh-2)
Breton	100.00(waseda-1)	96.00(uzh-2)	72.00(uzh-1)
Bulgarian	98.30(uzh-2)	83.80(uzh-2)	62.90(ua-8)
Catalan	98.90(uzh-2)	92.80(waseda-1)	72.50(ua-8)
Classical-syriac	100.00(axsemantics-1)	100.00(axsemantics-2)	96.00(uzh-2)
Cornish	—	70.00(uzh-1)	40.00(ua-4)
Crimean-tatar	100.00(iit-varanasi-1)	98.00(uzh-2)	91.00(iitbhu-iiith-2)
Czech	94.70(uzh-1)	87.20(uzh-1)	46.50(uzh-2)
Danish	95.50(uzh-1)	80.40(uzh-1)	87.70(ua-6)
Dutch	97.90(uzh-1)	85.70(uzh-1)	69.30(ua-6)
English	97.10(uzh-2)	94.50(uzh-1)	91.80(ua-8)
Estonian	98.40(uzh-2)	81.60(uzh-1)	35.20(uzh-1)
Faroese	87.10(bme-2)	72.60(uzh-1)	49.80(ua-8)
Finnish	95.40(uzh-1)	82.80(uzh-1)	25.70(uzh-1)
French	90.40(uzh-2)	80.90(uzh-2)	66.60(uzh-2)
Friulian	99.00(axsemantics-2)	97.00(iitbhu-iiith-1)	79.00(uzh-2)
Galician	99.50(uzh-1)	90.80(uzh-1)	61.10(uzh-2)
Georgian	99.10(uzh-1)	94.00(uzh-2)	88.20(ua-8)
German	90.20(uzh-2)	80.10(uzh-1)	67.10(ua-3)
Greek	91.70(uzh-1)	75.50(uzh-2)	32.30(uzh-1)
Greenlandic	—	98.00(uzh-2)	80.00(iitbhu-iiith-1)
Haida	100.00(axsemantics-2)	94.00(uzh-2)	63.00(uzh-2)
Hebrew	99.50(uzh-1)	85.40(uzh-1)	56.70(ua-8)
Hindi	100.00(axsemantics-1)	97.60(uzh-2)	78.00(uzh-2)
Hungarian	87.20(uzh-1)	74.50(iitbhu-iiith-2)	48.20(ua-8)
Icelandic	91.30(uzh-1)	73.80(uzh-1)	56.20(ua-8)
Ingrian	—	92.00(uzh-2)	46.00(iitbhu-iiith-2)
Irish	91.50(uzh-2)	77.10(uzh-1)	37.70(uzh-1)
Italian	98.00(uzh-2)	95.10(uzh-2)	57.40(uzh-2)
Kabardian	100.00(hamburg-1)	100.00(bme-2)	92.00(uzh-1)
Kannada	100.00(bme-3)	94.00(uzh-2)	61.00(uzh-1)
Karelian	—	100.00(uzh-2)	94.00(ua-5)
Kashubian	—	88.00(bme-2)	68.00(ua-5)
Kazakh	—	88.00(iitbhu-iiith-2)	86.00(uzh-2)
Khakas	—	98.00(bme-3)	86.00(iitbhu-iiith-2)
Khaling	99.70(uzh-1)	86.00(iitbhu-iiith-1)	33.80(ua-8)
Kurmanji	94.60(uzh-1)	93.20(uzh-1)	87.40(uzh-2)
Ladin	99.00(uzh-2)	95.00(uzh-2)	72.00(uzh-1)
Latin	78.90(bme-2)	53.30(uzh-1)	33.10(ua-6)

Table 9: Best per-form accuracy (and corresponding system) by language. First 50 languages.

	Task 1 - Part 2		
	High	Medium	Low
Latvian	98.20(uzh-2)	90.60(uzh-1)	57.30(ua-6)
Lithuanian	95.50(uzh-2)	63.90(uzh-1)	32.60(ua-6)
Livonian	100.00(uzh-2)	82.00(uzh-1)	35.00(ua-8)
Lower-sorbian	97.80(uzh-1)	85.10(uzh-1)	54.30(ua-6)
Macedonian	97.40(uzh-1)	91.60(uzh-1)	68.80(ua-6)
Maltese	97.00(uzh-2)	95.00(uzh-1)	49.00(ua-6)
Mapudungun	—	100.00(uzh-2)	86.00(ua-4)
Middle-french	99.30(uzh-2)	94.50(uzh-2)	84.50(uzh-2)
Middle-high-german	—	100.00(uzh-2)	84.00(uzh-2)
Middle-low-german	—	100.00(iitbhu-iiith-1)	54.00(uzh-1)
Murrinhpatha	—	96.00(uzh-2)	38.00(ua-8)
Navajo	91.00(bme-2)	54.30(uzh-1)	20.80(uzh-1)
Neapolitan	99.00(uzh-2)	99.00(uzh-2)	89.00(uzh-2)
Norman	—	88.00(iitbhu-iiith-1)	66.00(ua-4)
North-frisian	96.00(bme-1)	91.00(uzh-1)	45.00(iitbhu-iiith-2)
Northern-sami	98.30(uzh-1)	76.10(uzh-1)	35.80(ua-8)
Norwegian-bokmaal	92.10(uzh-2)	84.10(uzh-1)	90.10(ua-6)
Norwegian-nynorsk	94.90(uzh-2)	67.10(uzh-1)	83.60(ua-8)
Occitan	99.00(bme-2)	96.00(waseda-1)	77.00(uzh-2)
Old-armenian	90.40(uzh-2)	80.20(uzh-1)	42.00(uzh-2)
Old-church-slavonic	97.00(uzh-2)	93.00(uzh-2)	53.00(iitbhu-iiith-2)
Old-english	88.70(uzh-1)	65.60(uzh-1)	46.50(ua-8)
Old-french	92.40(uzh-1)	79.30(uzh-1)	46.20(uzh-2)
Old-irish	—	40.00(uzh-1)	8.00(baseline)
Old-saxon	98.30(uzh-1)	80.90(uzh-2)	46.60(ua-6)
Pashto	100.00(waseda-1)	85.00(uzh-1)	48.00(uzh-2)
Persian	99.90(bme-2)	93.40(uzh-2)	67.60(uzh-2)
Polish	93.40(uzh-2)	82.40(uzh-2)	49.40(ua-6)
Portuguese	98.60(uzh-2)	94.80(uzh-2)	75.80(uzh-2)
Quechua	99.90(uzh-2)	98.90(uzh-1)	70.20(uzh-2)
Romanian	89.00(uzh-2)	77.60(uzh-1)	46.20(uzh-1)
Russian	94.40(uzh-2)	86.90(uzh-1)	53.50(uzh-1)
Sanskrit	96.50(uzh-1)	85.90(uzh-2)	58.00(uzh-1)
Scottish-gaelic	—	94.00(iitbhu-iiith-1)	74.00(iitbhu-iiith-2)
Serbo-croatian	92.40(uzh-2)	86.10(uzh-1)	44.80(ua-3)
Slovak	97.10(uzh-1)	78.60(uzh-1)	51.80(uzh-2)
Slovene	97.40(uzh-1)	86.20(uzh-1)	58.00(uzh-2)
Sorani	90.60(uzh-2)	80.20(iitbhu-iiith-2)	40.10(uzh-1)
Spanish	98.10(uzh-2)	92.00(iitbhu-iiith-2)	73.20(ua-8)
Swahili	100.00(bme-3)	99.00(uzh-2)	72.00(iitbhu-iiith-2)
Swedish	93.30(uzh-1)	79.80(uzh-1)	79.00(ua-8)
Tatar	99.00(axsemantics-1)	98.00(uzh-2)	90.00(ua-8)
Telugu	—	—	96.00(ua-8)
Tibetan	—	56.00(uzh-2)	58.00(iitbhu-iiith-1)
Turkish	98.50(uzh-2)	90.70(uzh-1)	39.50(iitbhu-iiith-2)
Turkmen	—	98.00(iitbhu-iiith-1)	90.00(uzh-2)
Ukrainian	96.20(uzh-2)	81.40(uzh-1)	57.10(ua-6)
Urdu	100.00(iitbhu-iiith-1)	96.80(uzh-2)	72.50(uzh-2)
Uzbek	100.00(axsemantics-1)	100.00(axsemantics-2)	92.00(uzh-1)
Venetian	99.20(uzh-2)	95.10(uzh-2)	78.80(uzh-2)
Votic	90.00(uzh-2)	88.00(uzh-2)	34.00(ua-7)
Welsh	95.00(bme-3)	85.00(bme-2)	55.00(uzh-2)
West-frisian	99.00(uzh-1)	98.00(uzh-2)	56.00(uzh-1)
Yiddish	100.00(uzh-2)	94.00(uzh-2)	87.00(ua-8)
Zulu	99.80(uzh-1)	87.30(uzh-2)	33.00(uzh-1)

Table 10: Best per-form accuracy (and corresponding system) by language. Remaining 53 languages.

	Track 1						Track 2					
	Original			Plausible			Original			Plausible		
	High	Medium	Low	High	Medium	Low	High	Medium	Low	High	Medium	Low
BME-HAS	65.69	45.71	29.34	73.21	51.28	32.98	51.83	36.82	24.71	60.15	43.80	31.18
COPENHAGEN	**68.51**	**56.70**	24.40	**76.10**	**63.24**	26.24	**54.93**	45.18	29.38	60.50	51.36	33.77
CUBoulder–1	59.73	46.27	23.16	66.22	52.52	25.59	48.97	38.29	23.76	55.63	43.33	26.83
CUBoulder–2	50.32	42.08	29.86	53.89	46.85	34.85	-	-	-	-	-	-
NYU	-	-	-	-	-	-	-	-	33.38	-	-	38.62
UZH	-	53.02	**42.42**	-	61.02	**48.49**	-	**48.88**	**38.60**	-	**55.67**	**45.09**
NEURAL-BL	62.41	44.09	1.85	69.53	48.81	2.63	54.48	38.56	2.19	**60.79**	46.74	3.11
COPY-BL	36.62	36.62	36.62	42.00	42.00	42.00	36.62	36.62	36.62	42.00	42.00	42.00

Table 11: Overall accuracies (in %-points) for Tracks 1 and 2 in Task 2 for different training data settings. Results are presented separately with regard to the original forms in the UD test data sets and the manually annotated sets of plausible forms. NEURAL-BL refers to the baseline encoder-decoder system and COPY-BL to the "lemma copying" baseline system. Note that the output of the COPY-BL is independent of the training data and therefore results for the high, medium and low data setting are the same.

Track 1

	Original			Plausible		
	High	Medium	Low	High	Medium	Low
de	73.21 (BME-HAS)	63.90 (UZH)	60.06 (UZH)	77.55 (BME-HAS)	67.34 (UZH)	62.39 (UZH)
en	77.84 (CPH)	68.08 (CBL)	68.08 (UZH)	86.81 (CPH)	76.23 (CPH)	74.02 (UZH)
es	56.24 (CPH)	51.33 (CPH)	34.78 (UZH)	67.88 (CPH)	60.59 (CPH)	42.08 (UZH)
fi	55.27 (CPH)	35.71 (CPH)	24.90 (UZH)	63.02 (CPH)	43.07 (CPH)	28.97 (UZH)
fr	70.67 (CPH)	60.29 (CPH)	35.03 (UZH)	-	-	-
ru	77.91 (CPH)	63.05 (CPH)	40.76 (UZH)	81.53 (CPH)	66.57 (CPH)	43.47 (UZH)
sv	69.26 (CPH)	57.66 (CPH)	33.30 (UZH)	80.32 (CPH)	67.23 (CPH)	40.00 (UZH)

Track 2

	Original			Plausible		
	High	Medium	Low	High	Medium	Low
de	65.72 (NBL)	60.26 (UZH)	59.15 (UZH)	69.97 (NBL)	64.21 (UZH)	61.38 (UZH)
en	71.90 (CPH)	68.08 (UZH)	68.08 (UZH)	79.86 (CPH)	75.63 (CPH)	74.02 (UZH)
es	51.05 (NBL)	42.50 (CPH)	32.68 (UZH)	59.19 (NBL)	51.75 (CPH)	37.31 (CPH)
fi	34.82 (NBL)	27.06 (UZH)	24.40 (UZH)	41.17 (NBL)	31.89 (UZH)	28.21 (UZH)
fr	61.51 (CPH)	45.62 (CPH)	29.53 (CPH)	-	-	-
ru	56.73 (BME-HAS)	54.02 (UZH)	28.11 (UZH)	60.04 (BME-HAS)	56.53 (UZH)	30.42 (UZH)
sv	55.96 (CPH)	47.87 (UZH)	32.77 (UZH)	66.06 (CPH)	56.17 (UZH)	39.36 (UZH)

Table 12: Best accuracies (in %-points) and the for all tracks, settings and languages in task 2. The best performing system is given in parentheses. "CPH" refers to "COPENHAGEN", "NBL" to the neural baseline system and "CBL" to the "lemma copying" baseline system. Note, that there are no results for French with regard to plausible forms because this gold standard data set was not annotated for plausible forms (see subsection 3.2).

may affect the performance of low-resource data settings, especially for the cloze task. In the inflection task, some results from last year (Zhou and Neubig, 2017) did not see significant gains by using extra data.

Only one team tried to learn inflection in a multilingual setting—i.e. to use all training data to train one model. Such transfer learning is an interesting avenue of future research, but evaluation could be difficult. Whether any cross-language transfer is actually being learned vs. whether having more data better biases the networks to copy strings is an evaluation step to disentangle.[13]

Creating new data sets that accurately reflect learner exposure (whether L1 or L2) is also an important consideration in the design of future shared tasks.

The results for task 2 show that evaluation against the original test form versus against set of plausible forms results in a very similar ranking of systems, justifying the use of the former, much simpler, method for future shared tasks. No manual annotation would then be required for the creation of test sets, allowing the inclusion of a wider variety of languages.

In track 2 of task 2, it turned out to be difficult to achieve clear improvements over the neural baseline system. This may be a consequence of the limited amount of training data. Increasing the amount of training data is an obvious solution, but encouraging the use of external datasets for semi-supervised learning could also be an interesting direction to pursue. Such semi-supervised methods could take the form of pretrained embeddings from monolingual corpora or more expressive models dedicated to improving morphological inflection, e.g., Wolf-Sonkin et al. (2018).

7 Conclusion

The CoNLL–SIGMORPHON 2018 shared task introduced a new cloze-test task with data sets for 7 languages, as well as extended the existing inflection task to include 103 languages. In task 1 (inflection) 27 systems were submitted, while 6 systems were submitted in task 2 (cloze test). Neural network models prevailed in both, although significant modifications to standard architectures were required to beat a simple baseline in the low data settings in both tasks.

[13] This has been recently addressed by Jin and Kann (2017).

As in previous years, we compared inflection system performance to oracle ensembles, showing that systems possessed complementary strengths. We released the training, development, and test sets for each task, and expect these to be useful for future endeavors in morphological learning, both in sentential context and in the case of isolated word inflection.

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A Detailed Task 1 Results

This section contains detailed results for each submitted system on each language. Systems are ordered by average per-form accuracy for each sub-task and data condition. Three metrics are presented for each system/language combination.

1. Per-Form Accuracy: Percentage of test forms inflected correctly.
2. Levenshtein Distance: Average Levenshtein distance of system-predicted form from gold inflected form.

Scores in bold include the highest scoring non-oracle system for each language as well as any other systems that did not differ significantly in terms of per-form accuracy according to a sign test ($p >= 0.05$). Scores marked with a † indicate submissions that were significantly better than the feature combination oracle ($p < 0.05$), showing per-feature generalization. Scores marked with ‡ did not differ significantly from the ensemble oracle, suggesting minimal complementary information across systems.

	oracle-fc	oracle-e	uzh-01	uzh-02	bme-02	iitbhu-iiith-01	iitbhu-iiith-02	bme-03	bme-01	msu-04	iit-varanasi-01	waseda-01
Adyghe	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	97.90/0.02	**99.90/0.00**‡	**99.90/0.00**‡	99.40/0.01	99.20/0.01	99.30/0.01	**99.80/0.00**‡	95.00/0.07
Albanian	100.00/*	99.60/*	97.70/0.08	96.50/0.12	**98.90/0.02**	98.00/0.04	98.00/0.04	97.50/0.05	97.50/0.05	95.00/0.14	96.50/0.05	88.80/0.41
Arabic	100.00/*	97.40/*	**93.70/0.28**	**93.50/0.28**	92.20/0.30	**93.30/0.26**	**93.30/0.26**	90.30/0.32	90.60/0.37	0.00/9.16	84.40/0.45	90.20/0.34
Armenian	100.00/*	99.60/*	**96.40/0.07**	**96.80/0.05**	**96.90/0.05**	**96.10/0.07**	**96.10/0.07**	94.70/0.09	94.70/0.09	94.90/0.12	93.70/0.10	94.30/0.10
Asturian	99.20/*	99.80/*	**98.70/0.02**	**98.50/0.03**	**98.00/0.04**	**98.60/0.03**	**98.60/0.03**	97.80/0.04	97.80/0.04	**98.40/0.03**	**98.50/0.03**	**98.40/0.03**
Azeri	100.00/*	100.00/*	**98.00/0.02**‡	**98.00/0.02**‡	**97.00/0.05**‡	**99.00/0.01**‡	**99.00/0.01**‡	**98.00/0.02**‡	**98.00/0.02**‡	**98.00/0.02**‡	**99.00/0.02**‡	93.00/0.10
Bashkir	100.00/*	100.00/*	**99.90/0.00**‡	**99.90/0.00**‡	**98.00/0.00**‡	**99.80/0.00**‡	**99.80/0.00**‡	**99.80/0.00**‡	**99.80/0.00**‡	**99.80/0.00**‡	**99.70/0.01**‡	93.20/0.11
Basque	99.00/*	99.70/*	**98.90/0.02**	**98.70/0.03**	**98.90/0.02**	**98.60/0.03**	**98.60/0.03**	**98.30/0.03**	98.10/0.07	95.10/0.09	98.00/0.04	97.20/0.06
Belarusian	100.00/*	98.90/*	**94.90/0.09**	**94.70/0.09**	93.10/0.14	92.10/0.14	92.10/0.14	92.90/0.12	92.60/0.12	92.70/0.14	88.40/0.20	85.60/0.31
Bengali	100.00/*	99.00/*	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.05**‡	**99.00/0.02**‡	**99.00/0.02**‡	**99.00/0.05**‡	**99.00/0.05**‡	**98.00/0.06**‡	**99.00/0.05**‡	**98.00/0.06**‡
Breton	94.00/*	100.00/*	**97.00/0.05**‡	**98.00/0.06**‡	92.00/0.22	**99.00/0.03**‡	**99.00/0.03**‡	93.00/0.17	93.00/0.17	**96.00/0.08**‡	93.00/0.17	**100.00/0.00**†‡
Bulgarian	100.00/*	99.40/*	**98.10/0.04**	**98.30/0.04**	96.40/0.06	96.80/0.05	96.80/0.05	95.40/0.08	94.90/0.08	96.20/0.06	94.50/0.10	91.90/0.21
Catalan	100.00/*	99.60/*	**98.70/0.04**	**98.90/0.03**	**98.40/0.04**	97.70/0.04	97.70/0.04	**98.20/0.05**	**98.20/0.05**	**98.40/0.04**	98.00/0.05	**98.50/0.04**
Classical-syriac	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**98.00/0.02**‡	**97.00/0.04**‡	**100.00/0.00**‡	**100.00/0.00**‡	**98.00/0.02**‡
Crimean-tatar	100.00/*	100.00/*	**98.00/0.04**‡	**98.00/0.04**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**100.00/0.00**‡	**97.00/0.05**‡
Czech	99.80/*	97.90/*	**94.70/0.10**	**94.50/0.11**	93.20/0.12	91.10/0.16	91.10/0.16	92.00/0.14	92.00/0.14	93.10/0.12	88.00/0.23	90.70/0.21
Danish	100.00/*	98.50/*	**95.50/0.07**	94.60/0.08	90.40/0.16	91.50/0.13	91.50/0.13	89.40/0.17	89.40/0.17	91.80/0.12	91.30/0.13	90.70/0.15
Dutch	100.00/*	99.20/*	**97.90/0.03**	**97.70/0.04**	96.80/0.05	95.30/0.09	95.30/0.09	94.60/0.08	94.60/0.08	96.00/0.06	93.10/0.12	95.60/0.07
English	100.00/*	99.20/*	**97.00/0.06**	**97.10/0.06**	**96.70/0.06**	**96.30/0.07**	**96.30/0.07**	96.10/0.07	95.80/0.08	94.30/0.11	95.80/0.07	95.40/0.08
Estonian	100.00/*	99.60/*	**98.30/0.05**	**98.40/0.05**	97.00/0.07	97.30/0.06	97.30/0.06	96.90/0.07	96.90/0.07	94.40/0.11	95.90/0.09	91.50/0.21
Faroese	100.00/*	97.50/*	**85.60/0.29**	**86.40/0.26**	**87.10/0.26**	83.90/0.33	83.90/0.33	83.80/0.33	**85.30/0.27**	84.80/0.33	81.10/0.37	81.30/0.37
Finnish	100.00/*	98.90/*	**95.40/0.09**	**94.90/0.09**	93.30/0.11	92.30/0.15	92.30/0.15	92.00/0.15	92.00/0.15	89.80/0.19	76.40/0.47	84.40/0.36
French	100.00/*	96.60/*	**90.20/0.16**	**90.40/0.16**	88.10/0.19	87.60/0.21	87.60/0.21	86.40/0.22	86.40/0.22	88.50/0.20	81.10/0.32	84.80/0.25
Friulian	100.00/*	99.00/*	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡	**99.00/0.03**‡
Galician	100.00/*	99.80/*	**99.50/0.01**‡	**99.30/0.01**‡	**99.30/0.01**‡	**98.90/0.01**	**98.90/0.01**	**99.20/0.01**	**99.20/0.01**	97.90/0.04	98.70/0.02	98.60/0.03
Georgian	100.00/*	99.60/*	**99.10/0.01**‡	**98.80/0.01**	98.00/0.05	98.10/0.02	98.10/0.02	97.10/0.05	96.60/0.05	97.50/0.04	97.30/0.04	97.80/0.04
German	100.00/*	96.70/*	**89.70/0.25**	**90.20/0.23**	88.50/0.27	87.60/0.26	87.60/0.26	86.20/0.29	86.20/0.29	88.30/0.24	83.70/0.33	87.50/0.27
Greek	100.00/*	97.30/*	**91.70/0.16**	**91.00/0.17**	89.10/0.24	88.20/0.23	88.20/0.23	86.60/0.26	86.60/0.26	88.60/0.22	80.80/0.38	83.70/0.31
Haida	100.00/*	100.00/*	**99.00/0.02**‡	**99.00/0.02**‡	**99.00/0.02**‡	93.00/0.23	93.00/0.23	**100.00/0.00**‡	**100.00/0.00**‡	**99.00/0.02**‡	**100.00/0.00**‡	66.00/0.73
Hebrew	100.00/*	99.70/*	**99.50/0.01**‡	**99.30/0.01**‡	**99.30/0.01**‡	98.80/0.02	98.80/0.02	98.50/0.02	98.50/0.02	98.20/0.02	97.30/0.03	98.40/0.02
Hindi	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**99.70/0.01**‡	**99.70/0.01**‡	**99.90/0.00**‡	**100.00/0.00**‡	**99.90/0.00**‡	99.40/0.01	73.60/0.71
Hungarian	100.00/*	94.30/*	**87.20/0.31**	**86.60/0.31**	85.50/0.34	**85.90/0.34**	**85.90/0.34**	83.70/0.38	83.70/0.38	84.30/0.36	82.30/0.41	79.60/0.47
Icelandic	100.00/*	96.90/*	**91.30/0.18**	**91.10/0.18**	87.00/0.27	85.00/0.29	85.00/0.29	86.00/0.27	86.00/0.27	86.10/0.30	83.90/0.32	81.90/0.34
Irish	100.00/*	96.90/*	**91.40/0.28**	**91.50/0.27**	**91.10/0.27**	87.60/0.39	87.60/0.39	87.70/0.37	88.80/0.33	87.20/0.36	67.20/0.99	77.80/0.72
Italian	100.00/*	98.80/*	**98.00/0.04**	**98.00/0.04**	97.40/0.04	**97.50/0.06**	**97.50/0.06**	96.30/0.07	96.70/0.06	**97.40/0.04**	95.70/0.08	**97.40/0.04**
Kabardian	100.00/*	100.00/*	**99.00/0.01**‡	**96.00/0.04**‡	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**98.00/0.02**‡	**98.00/0.02**‡	**97.00/0.03**‡	**99.00/0.01**‡	**95.00/0.09**‡
Kannada	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**98.00/0.02**‡	**98.00/0.02**‡	**100.00/0.00**‡	**99.00/0.01**‡	**99.00/0.01**‡	**100.00/0.00**‡	**99.00/0.02**‡
Khaling	100.00/*	100.00/*	**99.70/0.01**‡	**99.60/0.01**‡	**99.60/0.00**‡	**99.50/0.01**‡	**99.50/0.01**‡	**99.00/0.02**	**99.60/0.01**‡	93.90/0.08	98.40/0.03	**99.40/0.01**
Kurmanji	100.00/*	98.90/*	**94.60/0.06**	**94.40/0.07**	**93.60/0.12**	**93.80/0.11**	**93.80/0.11**	92.80/0.11	92.80/0.11	**93.40/0.08**	**93.50/0.08**	89.60/0.21
Ladin	100.00/*	100.00/*	**98.00/0.03**‡	**99.00/0.01**‡	**97.00/0.06**‡	**98.00/0.03**‡	**98.00/0.03**‡	**97.00/0.07**‡	**94.00/0.10**	**97.00/0.07**‡	**98.00/0.03**‡	**98.00/0.05**‡
Latin	100.00/*	94.40/*	75.90/0.35	74.60/0.39	**78.90/0.32**	73.70/0.42	73.70/0.42	**77.40/0.37**	**77.40/0.37**	72.40/0.42	61.50/0.60	65.40/0.55
Latvian	100.00/*	99.70/*	**97.70/0.03**	**98.20/0.02**	96.00/0.07	96.10/0.07	96.10/0.07	94.00/0.12	94.00/0.12	95.80/0.07	92.80/0.16	94.90/0.09
Lithuanian	100.00/*	98.90/*	**95.40/0.07**	**95.50/0.07**	91.60/0.13	91.80/0.15	91.80/0.15	87.50/0.19	90.90/0.14	88.90/0.16	88.10/0.19	88.10/0.23
Livonian	100.00/*	100.00/*	**98.00/0.03**‡	**100.00/0.00**‡	87.00/0.24	**98.00/0.03**‡	**98.00/0.03**‡	92.00/0.15	92.00/0.15	92.00/0.12	**97.00/0.06**‡	94.00/0.11
Lower-sorbian	100.00/*	99.30/*	**97.80/0.05**	**97.50/0.06**	96.60/0.07	96.30/0.07	96.30/0.07	96.40/0.06	96.40/0.06	95.60/0.09	94.30/0.11	95.40/0.10
Macedonian	100.00/*	99.00/*	**97.40/0.04**	**97.10/0.04**	95.30/0.07	**96.50/0.06**	**96.50/0.06**	94.40/0.10	94.30/0.09	95.30/0.07	94.60/0.08	88.30/0.16
Maltese	99.00/*	98.00/*	**96.00/0.09**‡	**97.00/0.07**‡	**94.00/0.08**‡	**95.00/0.10**‡	**95.00/0.10**‡	90.00/0.15	88.00/0.15	83.00/0.27	69.00/0.56	**95.00/0.08**‡
Middle-french	99.90/*	99.80/*	**99.20/0.01**	**99.30/0.02**‡	**99.00/0.02**	**98.70/0.02**	**98.70/0.02**	**98.60/0.03**	**98.60/0.03**	**99.00/0.02**	96.70/0.08	**98.70/0.03**
Navajo	100.00/*	97.00/*	88.10/0.29	87.40/0.33	**91.00/0.21**	83.50/0.44	83.50/0.44	86.70/0.32	86.70/0.32	87.50/0.28	75.30/0.53	83.70/0.39
Neapolitan	99.00/*	99.00/*	**99.00/0.02**‡	**99.00/0.02**‡	**98.00/0.06**‡	**97.00/0.06**‡	**97.00/0.06**‡	**97.00/0.09**‡	**97.00/0.09**‡	**97.00/0.04**‡	**97.00/0.06**‡	**95.00/0.13**‡
North-frisian	100.00/*	99.00/*	**94.00/0.15**‡	**95.00/0.14**‡	**95.00/0.10**‡	**96.00/0.05**‡	**96.00/0.05**‡	**94.00/0.15**‡	**96.00/0.06**‡	87.00/0.35	**96.00/0.12**‡	**92.00/0.14**
Northern-sami	100.00/*	99.10/*	**98.30/0.04**	**98.10/0.05**	96.20/0.07	96.90/0.06	96.90/0.06	95.20/0.10	95.80/0.08	96.10/0.07	92.60/0.12	94.50/0.11
Norwegian-bokmaal	99.90/*	98.60/*	**92.00/0.13**	**92.10/0.13**	88.30/0.19	89.00/0.18	89.00/0.18	88.20/0.19	88.20/0.19	88.60/0.18	89.00/0.17	**90.50/0.17**
Norwegian-nynorsk	100.00/*	98.90/*	**94.60/0.09**	**94.90/0.08**	85.30/0.26	84.60/0.26	84.60/0.26	90.80/0.15	90.80/0.15	86.80/0.23	82.60/0.29	83.40/0.28
Occitan	100.00/*	99.00/*	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**98.00/0.03**‡	**98.00/0.03**‡	**97.00/0.04**‡	**97.00/0.04**‡	**99.00/0.01**‡	**99.00/0.01**‡	**98.00/0.02**‡
Old-armenian	99.80/*	97.50/*	**90.40/0.19**	**90.40/0.19**	**89.30/0.21**	**89.10/0.21**	**89.10/0.21**	87.70/0.23	87.70/0.23	88.60/0.20	87.30/0.25	88.80/0.22
Old-church-slavonic	100.00/*	99.00/*	**97.00/0.04**‡	**97.00/0.04**‡	**94.00/0.10**‡	**96.00/0.07**‡	**96.00/0.07**‡	**94.00/0.10**‡	**93.00/0.11**	**93.00/0.12**	**97.00/0.04**‡	**97.00/0.04**‡
Old-english	100.00/*	97.20/*	**88.70/0.20**	**87.90/0.22**	**88.20/0.23**	86.00/0.25	86.00/0.25	**87.10/0.23**	**87.10/0.23**	84.50/0.27	83.40/0.30	83.70/0.28
Old-french	99.60/*	98.00/*	**92.40/0.13**	**91.70/0.15**	**91.40/0.17**	89.90/0.20	89.90/0.20	**91.50/0.15**	**91.50/0.16**	90.30/0.18	86.50/0.25	88.40/0.22
Old-saxon	100.00/*	99.60/*	**98.30/0.03**	**97.80/0.04**	97.20/0.05	97.00/0.06	97.00/0.06	96.10/0.07	96.30/0.06	95.40/0.07	96.30/0.06	95.10/0.08
Pashto	100.00/*	100.00/*	**98.00/0.04**‡	**97.00/0.05**‡	**98.00/0.03**‡	**99.00/0.01**‡	**99.00/0.01**‡	94.00/0.09	93.00/0.14	**97.00/0.07**‡	**100.00/0.00**‡	**100.00/0.00**‡
Persian	100.00/*	100.00/*	**99.80/0.00**‡	**99.80/0.00**‡	**99.90/0.00**‡	**99.70/0.00**‡	**99.70/0.00**‡	**99.60/0.01**‡	**99.50/0.01**‡	98.60/0.02	98.90/0.01	62.90/1.14
Polish	100.00/*	97.80/*	**93.00/0.16**	**93.40/0.14**	90.80/0.25	88.70/0.26	88.70/0.26	89.30/0.25	89.30/0.25	87.30/0.25	82.80/0.40	89.30/0.24
Portuguese	100.00/*	99.40/*	**98.60/0.02**	**98.60/0.02**	**98.20/0.03**	**98.00/0.04**	**98.00/0.04**	97.90/0.03	97.90/0.03	**97.80/0.04**	**98.50/0.02**	**97.90/0.04**
Quechua	100.00/*	99.90/*	**99.90/0.00**‡	**99.90/0.00**‡	**99.60/0.01**‡	**99.50/0.01**‡	**99.50/0.01**‡	99.30/0.01	99.30/0.01	99.30/0.01	**99.40/0.01**‡	95.10/0.10
Romanian	100.00/*	96.80/*	**88.30/0.35**	**89.00/0.34**	**87.90/0.39**	85.80/0.40	85.80/0.40	84.10/0.50	85.20/0.46	84.60/0.42	79.00/0.58	83.20/0.52
Russian	100.00/*	97.90/*	**94.00/0.15**	**94.40/0.13**	92.00/0.28	91.00/0.27	91.00/0.27	90.40/0.27	90.40/0.27	92.00/0.21	85.40/0.35	88.40/0.34
Sanskrit	100.00/*	99.30/*	**96.50/0.05**	**96.30/0.06**	93.00/0.12	94.40/0.09	94.40/0.09	93.80/0.10	93.80/0.10	93.50/0.10	92.10/0.12	87.10/0.20
Serbo-croatian	100.00/*	96.80/*	**92.10/0.16**	**92.40/0.15**	**91.30/0.17**	**91.30/0.18**	**91.30/0.18**	90.00/0.18	90.00/0.18	87.80/0.25	84.10/0.36	85.50/0.28
Slovak	100.00/*	99.70/*	**97.10/0.04**	**96.90/0.04**	94.20/0.09	92.50/0.14	92.50/0.14	93.30/0.10	93.30/0.10	93.10/0.12	92.80/0.13	90.80/0.16
Slovene	100.00/*	99.60/*	**97.40/0.05**	**97.30/0.05**	94.90/0.10	94.80/0.08	94.80/0.08	94.10/0.11	94.90/0.10	33.30/0.77	95.30/0.08	95.60/0.07
Sorani	100.00/*	99.30/*	**90.60/0.11**	**90.60/0.11**	88.90/0.13	**89.50/0.13**	**89.50/0.13**	**89.50/0.14**	**89.50/0.14**	**89.30/0.13**	**89.00/0.13**	88.30/0.14
Spanish	100.00/*	99.90/*	**97.90/0.03**	**98.10/0.02**	**97.90/0.03**	**97.70/0.03**	**97.70/0.03**	96.20/0.06	96.20/0.06	**97.70/0.03**	93.40/0.13	**97.20/0.04**
Swahili	100.00/*	100.00/*	**99.00/0.01**‡	**99.00/0.01**‡	**100.00/0.00**‡	**99.00/0.01**‡	**99.00/0.01**‡	**100.00/0.00**‡	**99.00/0.01**‡	**98.00/0.02**‡	**100.00/0.00**‡	**98.00/0.02**‡
Swedish	100.00/*	98.50/*	**93.30/0.12**	**93.10/0.12**	89.30/0.19	88.10/0.23	88.10/0.23	88.40/0.21	88.40/0.21	89.10/0.20	87.20/0.21	88.10/0.22
Tatar	100.00/*	99.00/*	**98.00/0.02**‡	**98.00/0.02**‡	**98.00/0.02**‡	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**99.00/0.01**‡	**96.00/0.04**‡
Turkish	100.00/*	99.40/*	**98.10/0.03**	**98.50/0.02**	**97.80/0.03**	97.10/0.07	97.10/0.07	97.30/0.04	97.30/0.04	97.40/0.04	97.30/0.04	89.50/0.21
Ukrainian	100.00/*	98.70/*	**96.00/0.06**	**96.20/0.06**	91.40/0.16	92.80/0.14	92.80/0.14	91.60/0.14	91.70/0.16	93.40/0.12	92.50/0.13	89.10/0.18
Urdu	100.00/*	100.00/*	**99.50/0.01**‡	**99.50/0.01**‡	99.30/0.01	**100.00/0.00**‡	**100.00/0.00**‡	99.20/0.01	99.40/0.01	99.20/0.01	**99.70/0.01**‡	97.30/0.04
Uzbek	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**98.00/0.03**‡	93.00/0.28
Venetian	99.60/*	99.50/*	**99.00/0.02**‡	**99.20/0.01**‡	**98.80/0.02**	**98.80/0.02**	**98.80/0.02**	98.40/0.03	**98.70/0.02**	**99.00/0.02**‡	**99.10/0.02**‡	**99.00/0.02**‡
Votic	100.00/*	97.00/*	**88.00/0.15**	**90.00/0.13**	**84.00/0.29**	**82.00/0.26**	**82.00/0.26**	**85.00/0.25**	79.00/0.48	**84.00/0.23**	66.00/0.53	80.00/0.31
Welsh	100.00/*	98.00/*	**94.00/0.10**‡	**93.00/0.11**‡	**94.00/0.10**‡	**94.00/0.09**‡	**94.00/0.09**‡	**95.00/0.10**‡	**95.00/0.10**‡	**95.00/0.06**‡	**94.00/0.09**‡	**90.00/0.19**
West-frisian	100.00/*	100.00/*	**99.00/0.01**‡	**98.00/0.02**‡	91.00/0.26	91.00/0.23	91.00/0.23	93.00/0.22	93.00/0.22	89.00/0.23	74.00/0.55	92.00/0.18
Yiddish	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**99.00/0.01**‡	**100.00/0.00**‡	**100.00/0.00**‡	**99.00/0.01**‡	**98.00/0.02**‡	**97.00/0.04**‡	**99.00/0.06**‡	**98.00/0.04**‡
Zulu	99.90/*	99.90/*	**99.80/0.00**‡	**99.70/0.01**‡	99.00/0.02	**99.30/0.01**	**99.30/0.01**	99.20/0.02	98.10/0.04	96.00/0.08	97.20/0.05	98.90/0.01

Table 13: Task 1 High Condition Part 1.

	msu-03	axsemantics-01	msu-02	racai-01	hamburg-01	baseline	axsemantics-02	msu-01	tuebingen-oslo-03	tuebingen-oslo-02	kucst-01	tuebingen-oslo-01
Adyghe	96.70/0.03	99.00/0.01	99.00/0.01	92.00/0.08	93.90/0.07	91.60/0.08	**99.60/0.00**‡	95.40/0.05	97.40/0.04	88.20/0.16	98.30/0.02	88.90/0.24
Albanian	92.70/0.17	88.90/0.53	92.40/0.20	95.60/0.11	79.90/0.54	79.60/0.69	40.90/2.66	83.80/0.60	17.90/5.12	10.20/5.87	13.80/3.68	11.60/5.88
Arabic	0.00/9.25	58.20/1.38	0.00/4.70	88.50/0.40	74.70/0.76	47.10/1.49	34.00/2.42	0.00/7.79	79.40/0.67	68.70/1.05	0.00/10.78	0.10/7.55
Armenian	95.40/0.08	90.30/0.17	91.30/0.15	—	87.60/0.20	86.70/0.25	73.40/0.84	90.10/0.15	52.70/1.85	47.10/2.06	47.60/1.36	33.60/2.38
Asturian	**98.60/0.03**	95.30/0.11	94.60/0.12	95.40/0.13	96.20/0.07	95.10/0.11	91.10/0.13	97.00/0.07	84.20/0.24	82.70/0.34	88.80/0.26	69.70/0.56
Azeri	**98.00/0.06**‡	94.00/0.15	**95.00/0.05**‡	90.00/0.19	88.00/0.24	71.00/0.86	**100.00/0.00**‡	66.00/0.76	91.00/0.14	88.00/0.24	47.00/1.07	79.00/0.50
Bashkir	98.90/0.03	**99.80/0.00**‡	99.10/0.02	—	99.10/0.01	90.50/0.26	**99.80/0.00**‡	96.50/0.11	97.10/0.05	90.90/0.17	62.80/0.72	91.60/0.18
Basque	94.50/0.10	8.20/2.45	13.40/3.17	86.80/0.35	46.90/1.24	7.60/3.37	5.40/2.28	24.30/2.85	6.20/2.85	9.60/2.58	73.20/0.51	8.10/2.58
Belarusian	86.40/0.24	47.30/1.25	81.60/0.62	3.80/2.73	57.20/1.28	40.80/1.56	52.80/1.23	68.20/1.66	69.00/1.22	53.30/1.68	62.60/0.78	57.40/1.61
Bengali	**99.00/0.05**‡	**96.00/0.12**‡	**96.00/0.09**‡	**99.00/0.03**‡	93.00/0.14	81.00/0.26	78.00/0.27	90.00/0.23	55.00/0.75	72.00/0.52	82.00/0.48	65.00/0.60
Breton	**95.00/0.14**‡	80.00/0.55	79.00/0.68	—	91.00/0.17	73.00/0.85	85.00/0.22	82.00/0.38	48.00/1.05	70.00/0.66	67.00/0.56	48.00/1.03
Bulgarian	95.80/0.07	88.70/0.21	91.70/0.14	77.80/0.38	79.60/0.31	89.00/0.18	75.60/0.82	95.30/0.08	63.70/1.31	46.90/1.83	59.70/0.80	51.40/1.89
Catalan	98.00/0.04	95.90/0.12	95.00/0.12	89.40/0.14	87.60/0.21	95.60/0.10	92.10/0.14	96.30/0.09	91.60/0.15	76.90/0.43	87.90/0.20	56.00/0.96
Classical-syriac	**99.00/0.01**‡	**100.00/0.00**‡	**99.00/0.01**‡	87.00/0.18	**100.00/0.00**‡	**97.00/0.03**‡	**99.00/0.01**‡	88.00/0.16	76.00/0.30	65.00/0.40	80.00/0.23	94.00/0.06
Crimean-tatar	94.00/0.14	**98.00/0.04**‡	**99.00/0.03**‡	94.00/0.09	**98.00/0.04**‡	**95.00/0.08**‡	**98.00/0.04**‡	**98.00/0.04**‡	**97.00/0.06**‡	92.00/0.12	**96.00/0.07**‡	**95.00/0.09**‡
Czech	92.40/0.15	89.20/0.23	85.90/0.26	90.20/0.20	82.40/0.35	90.50/0.20	83.00/0.69	79.90/0.50	67.40/1.50	55.00/1.55	31.90/2.07	43.60/2.18
Danish	90.40/0.15	92.70/0.13	79.50/0.32	91.80/0.13	76.00/0.36	86.70/0.25	90.40/0.14	66.40/1.04	85.00/0.27	73.30/0.45	64.50/0.81	66.60/0.73
Dutch	94.20/0.11	85.10/0.34	87.20/0.24	92.20/0.13	82.30/0.26	87.70/0.22	88.60/0.22	86.70/0.24	77.00/0.50	59.40/0.90	—	53.20/1.20
English	**96.40/0.06**	95.80/0.07	85.30/0.22	93.80/0.11	94.70/0.08	**95.90/0.06**	**96.50/0.06**	91.60/0.12	88.50/0.27	88.00/0.26	—	70.90/0.70
Estonian	93.30/0.14	87.70/0.33	88.60/0.21	93.80/0.12	67.20/0.65	78.40/0.38	64.10/1.24	81.20/0.84	45.80/2.64	33.30/2.82	42.40/1.35	37.00/3.21
Faroese	79.20/0.42	79.60/0.44	72.90/0.54	76.30/0.52	56.30/0.84	75.90/0.49	76.80/0.39	40.10/1.90	56.60/0.87	56.80/0.91	27.60/1.50	48.40/1.18
Finnish	92.40/0.14	77.00/0.65	73.70/0.43	87.20/0.24	43.80/0.88	78.60/0.34	52.00/2.18	83.30/0.44	23.20/4.90	19.30/5.04	1.40/5.87	14.10/5.66
French	87.90/0.22	85.30/0.27	78.00/0.36	84.30/0.26	72.50/0.48	82.80/0.29	79.60/0.40	51.50/1.60	61.80/0.84	62.20/0.87	—	60.20/0.91
Friulian	**97.00/0.05**‡	**97.00/0.08**‡	**97.00/0.07**‡	78.00/0.24	85.00/0.17	**96.00/0.09**‡	**99.00/0.03**‡	88.00/0.26	81.00/0.31	89.00/0.15	**95.00/0.09**‡	83.00/0.27
Galician	97.60/0.04	96.70/0.08	94.90/0.09	89.90/0.12	93.90/0.10	95.10/0.09	95.00/0.08	97.50/0.04	86.60/0.23	74.30/0.45	91.10/0.13	62.40/0.78
Georgian	97.90/0.03	95.10/0.13	93.50/0.12	97.80/0.04	95.10/0.06	94.10/0.12	95.40/0.15	96.10/0.06	79.00/0.46	77.60/0.53	80.60/0.41	82.30/0.46
German	87.40/0.24	82.30/0.44	78.90/0.46	37.40/1.11	77.10/0.49	81.00/0.58	82.30/0.43	68.20/0.69	60.50/1.06	52.70/1.44	—	46.50/1.77
Greek	88.10/0.22	78.20/0.82	81.00/0.45	81.10/0.36	58.90/0.95	78.40/0.40	54.80/1.58	81.40/0.48	40.50/2.64	27.30/3.44	20.70/2.39	31.20/3.22
Haida	**96.00/0.05**‡	93.00/0.17	**95.00/0.09**‡	**96.00/0.06**‡	15.00/1.95	66.00/0.73	**100.00/0.00**‡	**95.00/0.12**‡	90.00/0.22	77.00/0.69	21.00/3.72	60.00/1.60
Hebrew	98.20/0.02	84.30/0.30	86.10/0.20	85.70/0.15	83.70/0.22	53.70/0.57	54.50/0.70	61.20/0.50	23.10/1.57	28.80/1.45	77.80/0.30	30.40/1.32
Hindi	**99.70/0.01**‡	**100.00/0.00**‡	**99.80/0.00**‡	89.40/0.14	98.70/0.02	93.00/0.08	80.00/0.43	98.80/0.03	65.60/1.43	73.40/1.16	83.50/0.83	2.50/3.01
Hungarian	82.10/0.40	76.90/0.54	78.60/0.47	79.50/0.46	59.20/0.79	69.50/0.68	80.90/0.39	77.30/0.53	64.80/0.84	50.20/1.25	16.20/2.93	38.40/1.99
Icelandic	81.10/0.36	80.90/0.41	72.80/0.54	80.60/0.37	55.20/0.78	77.10/0.46	79.30/0.36	50.90/1.16	63.60/0.69	43.60/1.26	37.00/1.44	46.80/1.24
Irish	89.10/0.33	67.20/1.16	71.20/0.79	81.80/0.48	56.30/1.17	53.00/1.13	34.10/2.88	59.00/1.50	16.90/4.39	14.70/5.28	14.10/3.00	8.50/6.09
Italian	97.30/0.05	94.20/0.16	94.20/0.12	90.00/0.15	88.80/0.17	77.50/0.69	63.70/1.30	96.00/0.07	63.10/0.91	52.30/1.63	32.60/1.73	58.80/1.50
Kabardian	94.00/0.06	**99.00/0.01**‡	**98.00/0.02**‡	92.00/0.12	**100.00/0.00**‡	86.00/0.14	**99.00/0.01**‡	89.00/0.13	82.00/0.26	82.00/0.28	**96.00/0.05**‡	94.00/0.11
Kannada	**96.00/0.08**‡	90.00/0.36	74.00/0.92	**99.00/0.01**‡	91.00/0.20	66.00/0.75	**97.00/0.03**‡	52.00/1.85	38.00/2.21	36.00/1.77	—	50.00/2.02
Khaling	93.00/0.11	72.00/0.89	73.50/0.36	44.70/0.82	77.30/0.37	53.70/0.87	17.10/1.80	51.70/1.16	8.50/3.46	15.60/2.53	87.50/0.20	18.40/2.57
Kurmanji	**94.50/0.06**	92.60/0.12	**94.60/0.07**	90.40/0.17	**94.00/0.08**	93.00/0.08	87.80/0.36	**93.90/0.07**	70.00/0.98	69.40/1.10	66.40/0.99	59.30/1.47
Ladin	**96.00/0.08**‡	93.00/0.17	**94.00/0.12**	86.00/0.23	79.00/0.29	92.00/0.18	87.00/0.18	90.00/0.17	88.00/0.29	84.00/0.28	**93.00/0.16**	74.00/0.53
Latin	69.80/0.46	46.20/1.28	56.70/0.67	16.20/1.97	18.10/2.05	48.00/0.81	37.20/1.43	51.30/1.06	55.20/0.95	32.20/1.52	9.10/3.15	36.10/1.57
Latvian	96.10/0.06	93.20/0.21	90.70/0.15	92.90/0.11	91.10/0.15	92.80/0.17	90.20/0.29	93.40/0.11	71.50/0.74	66.10/0.85	50.20/1.30	56.50/1.26
Lithuanian	84.80/0.21	70.60/0.68	80.90/0.28	65.20/0.41	41.70/1.11	64.10/0.48	52.00/0.85	79.00/0.41	68.90/0.59	48.10/1.17	36.20/1.68	41.20/1.41
Livonian	92.00/0.16	82.00/0.40	77.00/0.59	87.00/0.31	68.00/0.62	67.00/0.75	76.00/0.60	74.00/0.66	60.00/1.43	50.00/1.56	56.00/0.95	40.00/2.16
Lower-sorbian	94.00/0.11	94.20/0.13	91.30/0.17	93.70/0.13	83.50/0.30	88.30/0.22	95.50/0.09	72.60/0.59	72.70/0.48	70.60/0.50	74.20/0.40	61.20/0.71
Macedonian	95.60/0.07	92.70/0.12	89.10/0.17	91.90/0.10	88.90/0.16	91.20/0.15	94.20/0.10	85.80/0.22	75.80/0.56	65.30/0.70	50.20/0.97	60.50/1.07
Maltese	85.00/0.26	63.00/0.72	66.00/0.61	4.00/3.00	89.00/0.20	16.00/1.85	28.00/1.43	48.00/0.92	21.00/2.13	12.00/2.33	41.00/1.32	8.00/2.62
Middle-french	**98.90/0.02**	97.00/0.07	96.50/0.07	96.70/0.05	93.50/0.09	95.10/0.10	95.40/0.16	98.50/0.02	90.30/0.26	80.20/0.47	80.90/0.42	79.60/0.49
Navajo	86.50/0.29	43.60/2.19	49.30/1.78	79.00/0.54	25.80/2.25	38.60/2.06	6.80/3.25	37.10/1.93	12.40/3.11	10.70/3.31	27.20/1.80	9.20/3.75
Neapolitan	**96.00/0.06**‡	**94.00/0.24**‡	**95.00/0.14**‡	—	52.00/0.66	**95.00/0.13**‡	**95.00/0.09**‡	72.00/0.72	79.00/0.33	73.00/0.41	54.00/1.72	76.00/0.63
North-frisian	**90.00/0.21**	80.00/0.41	59.00/1.44	15.00/4.44	83.00/0.40	36.00/2.70	33.00/2.23	45.00/3.17	17.00/3.91	16.00/3.64	—	7.00/4.53
Northern-sami	96.30/0.08	61.70/1.17	74.30/0.44	90.70/0.15	47.50/1.16	62.70/0.70	75.50/0.35	69.50/1.05	67.10/0.60	51.70/1.00	47.20/1.29	46.40/1.27
Norwegian-bokmaal	85.90/0.20	**90.80/0.15**	79.20/0.31	88.90/0.19	81.70/0.28	**90.50/0.17**	87.20/0.20	77.80/0.34	72.20/0.57	70.90/0.53	49.80/1.13	66.50/0.68
Norwegian-nynorsk	82.40/0.28	82.80/0.30	70.40/0.55	79.40/0.34	56.60/0.71	74.70/0.42	88.00/0.20	57.00/0.81	76.60/0.43	50.00/1.03	39.00/1.35	45.10/0.97
Occitan	**97.00/0.05**‡	**94.00/0.15**‡	**95.00/0.07**‡	83.00/0.27	83.00/0.17	**96.00/0.07**‡	92.00/0.09	**94.00/0.17**‡	86.00/0.21	85.00/0.25	**96.00/0.06**‡	75.00/0.63
Old-armenian	88.00/0.22	84.90/0.33	82.80/0.35	80.40/0.36	68.00/0.62	78.90/0.46	82.20/0.36	58.40/1.10	57.80/0.91	64.70/0.79	62.60/0.68	58.90/0.98
Old-church-slavonic	82.00/0.35	**92.00/0.15**	**93.00/0.15**	9.00/2.10	**93.00/0.10**	81.00/0.45	88.00/0.16	52.00/1.20	67.00/0.58	66.00/0.59	33.00/0.97	71.00/0.47
Old-english	84.20/0.27	69.30/0.59	65.40/0.55	28.20/1.18	50.90/0.84	40.60/0.92	34.30/1.30	63.90/0.77	58.30/0.86	56.60/0.94	—	43.80/1.23
Old-french	89.80/0.18	80.80/0.48	82.40/0.37	—	61.80/0.78	80.80/0.40	82.00/0.39	55.10/1.26	75.90/0.51	62.90/0.81	54.10/0.88	57.00/0.87
Old-saxon	94.50/0.10	87.30/0.28	77.70/0.39	54.50/0.66	72.30/0.46	59.90/0.67	54.00/0.67	64.30/0.94	72.80/0.49	68.70/0.53	76.70/0.33	42.90/1.24
Pashto	89.00/0.19	92.00/0.11	82.00/0.47	84.00/0.25	87.00/0.16	71.00/0.63	78.00/0.42	56.00/1.41	31.00/1.63	37.00/1.46	82.00/0.29	30.00/1.81
Persian	98.20/0.03	63.70/1.50	90.80/0.20	95.60/0.08	90.80/0.17	80.70/0.53	62.60/1.38	98.20/0.03	56.60/2.63	50.50/2.48	29.30/3.33	3.70/4.30
Polish	88.60/0.23	87.60/0.33	82.40/0.37	87.80/0.26	76.40/0.45	87.00/0.26	82.90/0.56	80.40/0.62	61.60/1.33	44.60/1.82	—	49.00/1.78
Portuguese	96.90/0.05	97.30/0.06	95.10/0.08	84.00/0.23	87.80/0.14	96.60/0.06	94.60/0.08	**98.50/0.02**	88.30/0.19	77.40/0.41	76.40/0.42	55.50/0.96
Quechua	99.00/0.02	**99.80/0.00**‡	99.00/0.02	96.80/0.05	81.00/0.32	95.10/0.10	98.80/0.04	99.30/0.02	91.30/0.20	9.70/3.79	43.60/12.02	78.40/0.56
Romanian	81.20/0.49	82.60/0.53	77.70/0.58	82.00/0.49	69.20/0.75	79.70/0.54	62.40/1.33	56.40/1.87	44.90/2.34	41.40/2.65	40.40/1.83	33.80/2.76
Russian	91.90/0.20	88.00/0.33	82.20/0.45	86.80/0.40	85.20/0.35	86.50/0.44	76.10/0.70	86.70/0.62	63.80/1.38	53.20/1.64	—	46.00/2.20
Sanskrit	89.70/0.16	92.80/0.12	87.50/0.22	76.60/0.38	79.20/0.36	80.40/0.35	93.70/0.09	50.40/1.43	70.70/0.65	71.70/0.51	53.80/1.31	74.40/0.48
Serbo-croatian	87.60/0.24	87.40/0.29	84.50/0.32	88.00/0.27	75.20/0.46	83.10/0.36	69.10/1.13	61.90/1.50	35.50/2.94	44.70/2.54	26.20/2.35	33.20/2.84
Slovak	92.70/0.12	91.50/0.13	82.90/0.29	88.80/0.17	73.90/0.44	83.30/0.28	91.10/0.14	51.40/1.25	67.60/0.54	66.00/0.55	61.60/0.67	59.20/0.68
Slovene	33.00/0.79	7.00/1.61	17.80/1.18	93.40/0.10	84.80/0.24	84.90/0.24	90.90/0.16	40.80/0.74	88.30/0.21	72.20/0.49	0.70/8.23	33.90/1.66
Sorani	87.90/0.15	76.00/0.53	80.90/0.27	86.80/0.18	59.30/0.60	63.60/0.68	27.60/2.22	53.20/1.49	12.60/3.06	16.40/2.83	28.50/1.81	12.70/2.95
Spanish	96.80/0.05	94.40/0.17	93.10/0.13	72.70/0.34	93.60/0.11	92.40/0.20	81.30/0.64	95.60/0.07	72.80/0.93	64.90/1.27	59.30/0.85	46.80/1.44
Swahili	**98.00/0.02**‡	**98.00/0.06**‡	**99.00/0.01**‡	**98.00/0.02**‡	**98.00/0.02**‡	71.00/0.44	1.00/3.15	94.00/0.09	5.00/3.22	5.00/2.74	88.00/0.19	4.00/2.73
Swedish	89.50/0.18	88.00/0.22	59.90/0.80	85.20/0.27	75.60/0.42	85.00/0.27	88.50/0.23	84.50/0.27	72.70/0.61	60.70/0.94	33.10/2.01	49.50/1.34
Tatar	**97.00/0.03**‡	**99.00/0.01**‡	**99.00/0.01**‡	**95.00/0.06**‡	**97.00/0.03**‡	**96.00/0.04**‡	**97.00/0.03**‡	**99.00/0.01**‡	**97.00/0.03**‡	86.00/0.17	45.00/1.73	93.00/0.08
Turkish	97.00/0.04	87.90/0.26	93.90/0.09	79.30/0.44	75.40/0.53	73.20/0.70	95.90/0.08	97.30/0.04	77.20/0.54	59.50/1.14	23.30/2.88	51.50/1.62
Ukrainian	91.60/0.15	93.10/0.15	83.70/0.30	90.50/0.20	76.10/0.41	86.20/0.29	87.20/0.25	82.50/0.48	76.70/0.44	62.80/0.75	36.10/1.36	65.30/0.71
Urdu	98.40/0.03	99.30/0.01	99.10/0.02	43.50/0.78	99.00/0.01	95.90/0.05	83.70/0.38	95.10/0.21	74.40/1.11	72.70/1.10	97.00/0.04	5.90/3.60
Uzbek	**96.00/0.10**‡	**100.00/0.00**‡	**100.00/0.00**‡	—	**100.00/0.00**‡	**96.00/0.04**‡	**99.00/0.01**‡	44.00/2.20	61.00/0.66	61.00/0.81	8.00/2.87	76.00/0.51
Venetian	97.90/0.03	98.50/0.03	97.60/0.05	98.50/0.03	98.20/0.03	93.10/0.11	97.60/0.04	98.40/0.03	89.20/0.18	87.10/0.20	87.60/0.46	77.80/0.43
Votic	77.00/0.37	37.00/1.37	52.00/0.85	—	41.00/0.83	37.00/1.35	66.00/0.47	12.00/2.46	48.00/0.88	49.00/0.90	23.00/1.53	34.00/1.58
Welsh	**92.00/0.16**	82.00/0.47	79.00/0.43	**92.00/0.13**	72.00/0.47	72.00/0.54	88.00/0.16	82.00/0.44	75.00/0.41	85.00/0.29	**90.00/0.15**	52.00/0.96
West-frisian	84.00/0.27	82.00/0.51	72.00/0.70	—	92.00/0.10	67.00/0.78	67.00/0.56	47.00/1.17	54.00/1.02	45.00/1.07	17.00/1.73	33.00/1.52
Yiddish	**95.00/0.05**‡	**97.00/0.10**‡	**98.00/0.07**‡	92.00/0.19	**96.00/0.07**‡	94.00/0.14	**99.00/0.01**‡	94.00/0.13	94.00/0.06	84.00/0.31	80.00/0.29	86.00/0.29
Zulu	96.90/0.06	93.80/0.16	95.60/0.11	73.30/0.40	98.50/0.02	68.30/0.64	2.50/3.03	87.60/0.28	2.70/2.88	2.50/3.63	72.30/0.62	2.40/3.55

Table 14: Task 1 High Condition Part 2.

	oracle-fc	oracle-e	uzh-01	uzh-02	iitbhu-iiith-02	iitbhu-iiith-01	waseda-01	msu-04	msu-03	hamburg-01	iit-varanasi-01	msu-02
Adyghe	100.00/*	97.20/*	**94.40/0.06**	**94.20/0.06**	93.40/0.07	93.40/0.07	87.80/0.16	80.60/0.46	93.50/0.07	92.10/0.08	92.90/0.08	**94.00/0.06**
Albanian	100.00/*	95.00/*	**88.10/0.30**	**87.20/0.33**	**88.80/0.24**	87.30/0.27	72.70/1.29	78.80/0.54	77.20/0.58	79.00/0.59	39.20/1.63	72.80/1.01
Arabic	98.40/*	86.90/*	**79.40/0.65**	**78.60/0.68**	**78.30/0.71**	74.40/0.81	66.70/1.02	0.00/10.73	0.00/9.77	63.80/1.03	38.80/1.90	0.00/4.70
Armenian	97.00/*	97.10/*	**92.80/0.13**	**92.40/0.13**	90.80/0.16	88.70/0.19	85.30/0.26	86.80/0.23	86.80/0.24	88.20/0.19	67.40/0.80	80.50/0.47
Asturian	97.10/*	96.20/*	**91.60/0.17**	**92.00/0.17**	**92.40/0.17**	**91.80/0.18**	**91.80/0.18**	90.30/0.19	89.40/0.22	**91.70/0.19**	90.00/0.20	88.40/0.27
Azeri	99.00/*	99.00/*	**95.00/0.11**‡	**94.00/0.15**‡	**96.00/0.08**‡	**92.00/0.14**	84.00/0.34	**96.00/0.11**‡	**92.00/0.16**	89.00/0.19	**94.00/0.14**‡	80.00/0.37
Bashkir	100.00/*	99.30/*	**96.70/0.08**	**97.30/0.06**	**96.50/0.08**	95.00/0.11	87.20/0.24	92.00/0.22	92.40/0.24	94.10/0.13	95.40/0.09	88.30/0.25
Basque	43.90/*	95.50/*	**88.00/0.23**†	86.00/0.27†	**88.10/0.25**†	86.50/0.28†	80.50/0.45†	59.50/0.91†	51.60/1.11†	33.10/1.66	69.20/0.58†	2.70/6.01
Belarusian	100.00/*	84.50/*	**70.40/0.97**	**69.50/0.97**	64.30/1.23	63.20/1.23	53.60/1.44	61.30/1.47	56.40/1.50	54.00/1.45	45.80/1.71	59.50/1.41
Bengali	100.00/*	99.00/*	**99.00/0.05**‡	**99.00/0.05**‡	**97.00/0.11**‡	**96.00/0.12**‡	**96.00/0.14**‡	88.00/0.29	**95.00/0.15**‡	92.00/0.22	**97.00/0.10**‡	84.00/0.31
Breton	93.00/*	97.00/*	**95.00/0.11**‡	**96.00/0.10**‡	**92.00/0.25**‡	90.00/0.29	**93.00/0.17**‡	**93.00/0.18**‡	**91.00/0.14**	88.00/0.22	**94.00/0.20**‡	77.00/0.80
Bulgarian	100.00/*	92.70/*	**83.30/0.26**	**83.80/0.25**	81.00/0.29	78.00/0.33	80.80/0.31	76.90/0.37	77.80/0.33	78.80/0.35	35.00/1.36	72.20/0.48
Catalan	100.00/*	96.80/*	**92.10/0.15**	**92.20/0.15**	**92.10/0.16**	**91.80/0.17**	**92.80/0.17**	90.00/0.21	90.50/0.19	84.40/0.27	83.80/0.28	85.40/0.34
Classical-syriac	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**99.00/0.01**‡	**99.00/0.01**‡	**100.00/0.00**‡	**99.00/0.01**‡	**96.00/0.04**‡	**97.00/0.03**‡	**99.00/0.01**‡	**97.00/0.04**‡
Cornish	92.00/*	88.00/*	**70.00/0.74**	**66.00/0.76**	**70.00/0.76**	**70.00/0.74**	46.00/2.44	**58.00/0.86**	36.00/1.62	52.00/1.00	**66.00/0.70**	10.00/2.78
Crimean-tatar	100.00/*	99.00/*	**98.00/0.04**‡	**98.00/0.04**‡	**97.00/0.06**‡	**97.00/0.06**‡	**92.00/0.11**	91.00/0.21	**93.00/0.12**	**96.00/0.06**‡	**98.00/0.04**‡	**95.00/0.07**‡
Czech	97.20/*	93.80/*	**87.20/0.26**	**86.60/0.28**	80.40/0.37	79.00/0.39	82.30/0.46	79.40/0.42	78.60/0.47	82.00/0.38	61.10/0.94	76.30/0.53
Danish	100.00/*	93.60/*	**80.40/0.30**	**80.00/0.31**	**79.20/0.33**	**78.60/0.34**	**79.60/0.32**	**78.80/0.34**	76.10/0.37	**79.00/0.32**	75.70/0.36	68.80/0.50
Dutch	100.00/*	96.20/*	**85.70/0.22**	**85.60/0.21**	82.00/0.28	81.90/0.28	77.10/0.37	80.40/0.31	**84.00/0.25**	77.80/0.38	71.00/0.49	65.90/0.52
English	100.00/*	97.20/*	**94.50/0.10**	**94.20/0.10**	**94.20/0.10**	**93.50/0.11**	91.50/0.14	92.70/0.13	**94.40/0.09**	90.20/0.14	90.90/0.15	86.40/0.25
Estonian	100.00/*	90.80/*	**81.60/0.30**	**81.50/0.31**	78.20/0.34	76.20/0.37	72.20/0.50	71.30/0.51	65.60/0.63	63.10/0.77	46.50/1.20	67.50/0.54
Faroese	100.00/*	86.60/*	**72.60/0.59**	**71.70/0.60**	69.10/0.61	68.00/0.62	68.20/0.72	68.00/0.68	66.20/0.71	56.10/0.84	48.90/1.02	60.10/0.78
Finnish	97.10/*	91.50/*	**82.80/0.27**	**82.30/0.29**	73.80/0.43	71.10/0.47	65.10/0.64	58.10/0.83	57.00/0.84	35.90/1.22	22.00/2.55	41.90/1.98
French	100.00/*	89.40/*	**80.20/0.33**	**80.90/0.32**	78.60/0.35	78.20/0.35	73.10/0.47	75.70/0.42	76.50/0.41	71.80/0.50	69.30/0.60	73.90/0.46
Friulian	100.00/*	99.00/*	**96.00/0.06**‡	**96.00/0.06**‡	**97.00/0.05**‡	**97.00/0.05**‡	**96.00/0.06**‡	**95.00/0.07**‡	**93.00/0.09**	81.00/0.24	**92.00/0.14**	**92.00/0.12**
Galician	99.90/*	95.70/*	**90.80/0.16**	**90.40/0.17**	88.90/0.18	88.40/0.18	88.90/0.18	85.80/0.27	82.90/0.29	86.00/0.23	82.50/0.29	82.80/0.33
Georgian	96.20/*	96.00/*	**93.90/0.14**	**94.00/0.14**	**93.50/0.17**	**93.40/0.17**	**93.20/0.17**	91.20/0.21	92.30/0.20	92.60/0.17	91.20/0.22	84.40/0.29
German	100.00/*	89.20/*	**80.10/0.48**	**79.50/0.48**	76.80/0.56	76.70/0.56	74.00/0.64	74.10/0.60	74.40/0.56	70.90/0.65	65.50/0.71	68.00/0.72
Greek	97.40/*	84.40/*	**75.30/0.53**	**75.50/0.55**	71.50/0.56	69.10/0.61	60.50/1.73	67.00/0.71	62.00/0.83	58.40/0.98	29.90/1.99	62.00/1.65
Greenlandic	100.00/*	100.00/*	**98.00/0.02**‡	**98.00/0.02**‡	**88.00/0.20**	**86.00/0.22**	74.00/2.40	68.00/0.38	80.00/0.22	68.00/0.40	84.00/0.22	70.00/0.38
Haida	100.00/*	96.00/*	**94.00/0.12**‡	**94.00/0.12**‡	87.00/0.32	85.00/0.36	62.00/1.98	**91.00/0.19**‡	**92.00/0.20**‡	16.00/2.15	**90.00/0.19**	81.00/0.38
Hebrew	100.00/*	96.10/*	**85.40/0.19**	84.50/0.20	**84.50/0.21**	83.10/0.23	76.90/0.32	81.70/0.25	80.10/0.26	77.90/0.30	64.70/0.52	64.40/0.47
Hindi	99.70/*	98.90/*	**97.50/0.03**	**97.60/0.03**	96.20/0.07	96.00/0.08	95.60/0.05	94.80/0.07	95.00/0.07	94.20/0.07	87.70/0.32	90.90/0.16
Hungarian	100.00/*	86.50/*	**73.70/0.53**	**73.40/0.55**	**74.50/0.51**	72.00/0.56	53.80/0.96	65.90/0.68	68.80/0.65	51.60/0.91	57.10/0.85	64.50/0.65
Icelandic	100.00/*	88.00/*	**73.80/0.52**	**73.60/0.52**	65.90/0.67	63.50/0.70	62.40/0.78	64.60/0.69	59.20/0.78	54.60/0.79	45.70/1.03	55.70/0.87
Ingrian	100.00/*	96.00/*	**92.00/0.14**‡	**92.00/0.12**‡	**90.00/0.24**‡	**90.00/0.18**‡	68.00/1.56	**88.00/0.20**‡	**86.00/0.22**‡	58.00/0.66	**88.00/0.18**‡	56.00/0.68
Irish	99.10/*	87.30/*	**77.10/0.67**	75.60/0.70	68.80/0.89	64.70/0.97	54.30/1.22	60.80/1.12	57.10/1.19	59.60/1.13	18.80/3.40	52.20/1.43
Italian	100.00/*	97.60/*	**94.90/0.09**	**95.10/0.09**	93.20/0.13	91.70/0.15	91.90/0.16	88.90/0.19	92.50/0.16	85.90/0.25	68.90/0.78	85.80/0.32
Kabardian	100.00/*	100.00/*	**97.00/0.03**‡	**98.00/0.02**‡	**98.00/0.02**‡	**98.00/0.02**‡	92.00/0.11	86.00/0.27	92.00/0.10	**95.00/0.06**‡	**97.00/0.03**‡	**97.00/0.03**‡
Kannada	100.00/*	99.00/*	**94.00/0.12**‡	**94.00/0.12**‡	**92.00/0.14**	**91.00/0.15**	**93.00/0.11**	87.00/0.26	87.00/0.23	86.00/0.24	85.00/0.26	64.00/1.19
Karelian	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**96.00/0.08**‡	**94.00/0.08**‡	78.00/1.92	**92.00/0.08**‡	**92.00/0.12**‡	82.00/0.28	**96.00/0.06**‡	76.00/0.28
Kashubian	100.00/*	96.00/*	**88.00/0.20**‡	**88.00/0.26**‡	**86.00/0.22**‡	**82.00/0.26**	66.00/1.96	**84.00/0.26**	**78.00/0.38**	**82.00/0.34**	**84.00/0.24**	72.00/0.48
Kazakh	100.00/*	96.00/*	**84.00/0.16**	**82.00/0.18**	**88.00/0.12**‡	**84.00/0.16**	70.00/1.76	76.00/0.26	74.00/0.28	**86.00/0.16**‡	50.00/0.50	**82.00/0.20**
Khakas	100.00/*	98.00/*	**98.00/0.04**‡	**98.00/0.04**‡	**98.00/0.04**‡	**98.00/0.04**‡	64.00/1.54	**98.00/0.04**‡	**98.00/0.02**‡	**96.00/0.06**‡	**98.00/0.04**‡	**98.00/0.04**‡
Khaling	90.90/*	94.40/*	83.20/0.29	82.40/0.30	**85.60/0.23**	**86.00/0.23**	**85.70/0.25**	41.40/1.18	43.40/1.23	68.30/0.65	59.40/0.80	20.10/2.61
Kurmanji	97.20/*	97.30/*	**93.20/0.10**	92.30/0.11	91.10/0.18	90.60/0.19	88.30/0.32	74.20/0.55	87.20/0.21	90.00/0.13	86.10/0.34	91.00/0.22
Ladin	97.00/*	98.00/*	**93.00/0.16**‡	**95.00/0.11**‡	**92.00/0.13**	**93.00/0.11**‡	**93.00/0.13**‡	80.00/0.27	87.00/0.21	76.00/0.26	**91.00/0.10**	89.00/0.29
Latin	100.00/*	74.30/*	**53.30/0.75**	**51.70/0.80**	46.20/0.89	44.80/0.94	37.90/1.16	38.20/1.17	40.80/1.10	21.40/1.94	31.30/1.37	37.50/1.26
Latvian	99.60/*	94.90/*	**90.60/0.15**	89.80/0.19	88.00/0.24	86.50/0.27	88.20/0.26	85.30/0.31	84.40/0.31	86.30/0.26	73.70/0.55	86.50/0.25
Lithuanian	98.90/*	78.80/*	**63.90/0.52**	**63.00/0.55**	55.60/0.75	53.40/0.78	52.00/0.70	45.90/0.88	48.10/0.87	40.80/1.13	46.80/0.96	55.00/0.77
Livonian	99.00/*	94.00/*	**82.00/0.35**	**79.00/0.42**	**75.00/0.45**	**77.00/0.40**	**74.00/0.50**	67.00/0.61	63.00/0.68	70.00/0.59	62.00/0.75	54.00/1.14
Lower-sorbian	100.00/*	95.00/*	**85.10/0.26**	**84.20/0.29**	**84.00/0.28**	82.30/0.30	81.40/0.34	78.20/0.39	80.80/0.35	78.60/0.40	69.80/0.50	78.90/0.39
Macedonian	98.40/*	97.20/*	**91.60/0.11**	**91.50/0.12**	**90.10/0.13**	88.50/0.15	88.10/0.16	86.40/0.19	84.30/0.21	87.40/0.17	75.10/0.38	84.20/0.24
Maltese	99.00/*	98.00/*	**95.00/0.10**‡	**94.00/0.11**‡	**91.00/0.20**	**90.00/0.19**	**89.00/0.22**	77.00/0.35	84.00/0.25	82.00/0.38	85.00/0.24	59.00/0.73
Mapudungun	100.00/*	100.00/*	**98.00/0.04**‡	**100.00/0.00**‡	**96.00/0.04**‡	**96.00/0.04**‡	76.00/1.46	**90.00/0.12**‡	88.00/0.14	**100.00/0.00**‡	**98.00/0.04**‡	**92.00/0.08**‡
Middle-french	99.80/*	97.50/*	**94.30/0.11**	**94.50/0.12**	**93.30/0.14**	92.60/0.16	**93.20/0.13**	92.90/0.15	92.70/0.15	89.00/0.19	89.40/0.23	90.80/0.19
Middle-high-german	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**96.00/0.08**‡	**96.00/0.08**‡	80.00/1.20	**92.00/0.12**‡	**92.00/0.14**‡	**96.00/0.10**‡	**92.00/0.14**‡	**90.00/0.14**‡
Middle-low-german	100.00/*	100.00/*	**98.00/0.02**‡	**98.00/0.02**‡	**98.00/0.02**‡	**100.00/0.00**‡	72.00/1.50	**94.00/0.06**‡	82.00/0.36	**96.00/0.04**‡	**92.00/0.16**‡	68.00/0.78
Murrinhpatha	100.00/*	100.00/*	**96.00/0.04**‡	**96.00/0.04**‡	**90.00/0.20**‡	**86.00/0.22**	70.00/1.34	76.00/0.52	78.00/0.50	**88.00/0.22**	**96.00/0.10**‡	44.00/1.26
Navajo	99.50/*	69.60/*	**54.30/1.20**	**54.00/1.27**	44.60/1.60	43.00/1.66	40.80/1.81	42.40/1.63	42.00/1.61	24.20/2.74	19.50/2.68	33.80/2.65
Neapolitan	99.00/*	99.00/*	**99.00/0.03**‡	**99.00/0.03**‡	**98.00/0.05**‡	**98.00/0.05**‡	**95.00/0.08**‡	**96.00/0.06**‡	93.00/0.11	49.00/0.71	**98.00/0.06**‡	**94.00/0.20**‡
Norman	100.00/*	94.00/*	**84.00/0.38**‡	**86.00/0.34**‡	**88.00/0.24**‡	**88.00/0.24**‡	66.00/2.08	38.00/1.10	34.00/1.28	58.00/0.94	26.00/1.62	46.00/2.04
North-frisian	100.00/*	94.00/*	**91.00/0.24**‡	**89.00/0.27**‡	**88.00/0.29**	**89.00/0.27**‡	**87.00/0.30**	78.00/0.67	70.00/0.74	75.00/0.61	85.00/0.39	49.00/1.98
Northern-sami	100.00/*	90.30/*	**76.10/0.42**	**75.20/0.44**	70.20/0.52	66.10/0.58	60.30/0.78	56.70/0.85	57.80/0.81	31.30/1.66	39.40/1.26	34.60/1.30
Norwegian-bokmaal	99.30/*	93.60/*	**84.10/0.24**	**84.00/0.24**	**83.50/0.27**	81.50/0.30	81.30/0.30	80.40/0.31	**82.70/0.28**	79.00/0.34	81.50/0.29	66.60/0.47
Norwegian-nynorsk	99.80/*	90.00/*	**67.10/0.55**	**65.90/0.57**	64.20/0.60	62.90/0.63	60.50/0.65	61.10/0.65	61.00/0.63	53.90/0.77	57.50/0.72	49.30/0.88
Occitan	100.00/*	97.00/*	**94.00/0.10**‡	**95.00/0.11**‡	**94.00/0.10**‡	**94.00/0.10**‡	**96.00/0.10**‡	**92.00/0.12**‡	89.00/0.22	81.00/0.22	**93.00/0.12**‡	89.00/0.23
Old-armenian	99.00/*	91.80/*	**80.20/0.39**	79.20/0.41	78.10/0.44	77.10/0.46	72.70/0.58	66.00/0.67	69.70/0.61	65.90/0.66	57.30/0.82	71.40/0.63
Old-church-slavonic	100.00/*	99.00/*	**93.00/0.11**	**93.00/0.11**	**87.00/0.24**	**87.00/0.23**	**90.00/0.16**	83.00/0.29	78.00/0.34	**89.00/0.18**	**87.00/0.19**	80.00/0.35
Old-english	100.00/*	83.90/*	**65.60/0.58**	**65.00/0.58**	62.70/0.64	60.30/0.69	56.30/0.72	52.90/0.77	58.30/0.70	45.70/0.93	42.40/1.13	33.50/1.20
Old-french	95.90/*	89.30/*	**79.30/0.41**	77.90/0.45	74.10/0.51	72.20/0.54	71.30/0.58	68.10/0.59	68.50/0.62	62.60/0.72	60.60/0.74	66.60/0.73
Old-irish	84.00/*	50.00/*	**40.00/1.66**‡	**34.00/2.14**	26.00/2.58	22.00/2.78	16.00/3.40	12.00/2.62	26.00/2.42	6.00/3.78	**24.00/2.52**	16.00/3.88
Old-saxon	97.60/*	92.40/*	**80.70/0.34**	**80.90/0.33**	74.90/0.39	74.10/0.41	70.30/0.49	70.90/0.49	71.10/0.47	67.40/0.55	64.70/0.60	47.60/1.04
Pashto	100.00/*	97.00/*	**85.00/0.31**	**83.00/0.28**	**85.00/0.23**	**81.00/0.28**	**77.00/0.50**	73.00/0.55	75.00/0.49	**80.00/0.31**	73.00/0.36	68.00/0.72
Persian	100.00/*	97.20/*	**93.40/0.10**	**93.40/0.10**	91.70/0.13	90.70/0.14	87.00/0.24	84.50/0.24	86.20/0.23	82.60/0.37	70.90/0.71	77.30/0.63
Polish	98.20/*	89.50/*	**82.20/0.40**	**82.40/0.38**	76.10/0.54	73.40/0.58	75.90/0.55	72.30/0.58	74.50/0.56	75.10/0.58	55.10/1.09	74.10/0.61
Portuguese	100.00/*	97.20/*	**94.70/0.08**	**94.80/0.08**	92.00/0.12	92.00/0.12	**93.80/0.10**	90.40/0.14	91.30/0.13	84.90/0.21	37.30/1.41	90.40/0.18
Quechua	85.90/*	99.60/*	**98.90/0.02**†	**98.70/0.03**†	**98.60/0.03**†	98.20/0.03†	70.90/1.49	96.70/0.06†	95.30/0.11†	78.40/0.40	77.30/0.55	73.30/1.45
Romanian	100.00/*	88.20/*	**77.60/0.57**	**77.10/0.58**	73.00/0.77	72.20/0.83	71.50/0.89	68.30/0.73	68.40/0.79	68.70/0.73	48.50/1.51	68.80/0.73
Russian	99.70/*	92.70/*	**86.90/0.30**	**86.80/0.28**	80.10/0.57	78.20/0.60	79.50/0.56	76.40/0.50	76.20/0.50	77.30/0.47	59.90/0.97	72.20/0.77
Sanskrit	99.30/*	93.20/*	**85.90/0.23**	**85.90/0.23**	**85.50/0.25**	**84.70/0.26**	79.10/0.36	78.50/0.36	77.70/0.39	79.80/0.33	68.80/0.54	79.60/0.36
Scottish-gaelic	100.00/*	96.00/*	**92.00/0.10**‡	**92.00/0.14**‡	**94.00/0.12**‡	**94.00/0.08**‡	72.00/1.66	**84.00/0.28**	72.00/0.50	**88.00/0.18**‡	**86.00/0.18**‡	**88.00/0.24**‡
Serbo-croatian	95.10/*	93.00/*	**86.10/0.27**	**85.20/0.27**	82.50/0.34	81.90/0.36	76.30/0.45	75.50/0.47	73.30/0.54	72.30/0.58	43.40/1.49	66.80/0.83
Slovak	100.00/*	92.40/*	**78.60/0.37**	**77.90/0.39**	73.90/0.45	72.30/0.47	73.90/0.47	71.00/0.46	68.90/0.50	70.30/0.51	58.70/0.67	68.40/0.54
Slovene	99.80/*	94.30/*	**86.20/0.22**	**85.80/0.23**	**85.00/0.25**	83.60/0.28	84.10/0.24	40.90/0.79	27.10/0.99	**84.70/0.26**	65.60/0.52	7.60/1.51
Sorani	97.40/*	93.00/*	**79.60/0.32**	**79.20/0.33**	**80.20/0.30**	77.80/0.34	72.00/0.49	64.20/0.61	64.40/0.61	49.30/0.81	55.90/0.90	56.40/1.19
Spanish	100.00/*	95.60/*	**91.40/0.14**	**91.10/0.15**	**92.00/0.14**	**91.20/0.16**	**91.50/0.15**	88.60/0.19	89.30/0.18	88.30/0.23	75.70/0.64	85.10/0.40
Swahili	100.00/*	99.00/*	**99.00/0.01**‡	**99.00/0.01**‡	**97.00/0.05**‡	**95.00/0.07**‡	92.00/0.14	85.00/0.22	84.00/0.28	**95.00/0.09**‡	87.00/0.29	92.00/0.13
Swedish	99.40/*	93.10/*	**79.80/0.35**	**79.50/0.35**	**77.80/0.40**	**78.30/0.40**	76.80/0.41	**77.80/0.37**	74.30/0.43	71.90/0.48	31.40/1.41	65.40/0.57
Tatar	100.00/*	99.00/*	**97.00/0.03**‡	**98.00/0.02**‡	**95.00/0.05**‡	**95.00/0.05**‡	92.00/0.11	**94.00/0.06**‡	**95.00/0.07**‡	**93.00/0.09**	**96.00/0.04**‡	**94.00/0.07**‡
Tibetan	100.00/*	72.00/*	**52.00/0.78**	**56.00/0.64**	**50.00/0.90**	40.00/1.00	38.00/1.36	**44.00/0.86**	**44.00/0.94**	**46.00/0.74**	22.00/1.36	**52.00/0.80**
Turkish	94.10/*	95.90/*	**90.70/0.17**	**90.30/0.17**	**90.00/0.27**	88.20/0.31	69.20/0.78	82.50/0.39	81.20/0.45	68.60/0.70	79.20/0.47	65.40/1.21
Turkmen	100.00/*	98.00/*	**94.00/0.08**‡	**94.00/0.08**‡	**98.00/0.02**‡	**98.00/0.02**‡	74.00/1.72	**94.00/0.06**‡	**94.00/0.06**‡	**90.00/0.18**‡	**96.00/0.04**‡	**98.00/0.02**‡
Ukrainian	99.30/*	93.50/*	**81.40/0.35**	80.40/0.38	77.60/0.42	76.00/0.43	74.00/0.49	73.00/0.46	71.70/0.47	77.50/0.41	46.60/0.85	69.80/0.50
Urdu	98.70/*	98.70/*	**96.70/0.04**	**96.80/0.04**	**96.70/0.04**	**96.40/0.05**	93.90/0.10	94.10/0.10	92.20/0.14	94.70/0.07	87.50/0.25	89.40/0.20
Uzbek	100.00/*	100.00/*	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	**96.00/0.04**‡	**100.00/0.00**‡	94.00/0.10	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡
Venetian	99.30/*	98.10/*	94.40/0.08	**95.10/0.08**	92.80/0.10	92.30/0.11	91.80/0.10	93.10/0.10	91.60/0.11	92.10/0.11	91.90/0.12	88.50/0.17
Votic	100.00/*	96.00/*	**86.00/0.16**	**88.00/0.14**	**86.00/0.18**	**83.00/0.22**	74.00/0.43	67.00/0.53	71.00/0.44	42.00/0.82	78.00/0.32	49.00/0.90
Welsh	100.00/*	90.00/*	**84.00/0.29**	**83.00/0.30**	**82.00/0.30**	**82.00/0.30**	**81.00/0.33**	77.00/0.39	71.00/0.48	67.00/0.63	**81.00/0.34**	67.00/0.61
West-frisian	100.00/*	100.00/*	**97.00/0.05**‡	**98.00/0.04**‡	89.00/0.25	86.00/0.30	**96.00/0.14**‡	90.00/0.11	74.00/0.43	91.00/0.21	**94.00/0.07**	73.00/0.68
Yiddish	100.00/*	99.00/*	**92.00/0.10**	**94.00/0.10**‡	**89.00/0.16**	**89.00/0.16**	**91.00/0.18**	85.00/0.19	**89.00/0.15**	**92.00/0.13**	**88.00/0.23**	**89.00/0.18**
Zulu	96.90/*	94.60/*	**87.20/0.28**	**87.30/0.27**	85.20/0.35	82.80/0.40	82.80/0.38	70.40/0.68	68.40/0.70	81.80/0.39	52.60/1.14	71.60/0.70

Table 15: Task 1 Medium Condition Part 1.

	bme-01	bme-03	bme-02	msu-01	baseline	axsemantics-02	axsemantics-01	kucst-01	tuebingen-oslo-03	tuebingen-oslo-02	tuebingen-oslo-01
Adyghe	90.80/0.12	90.50/0.13	93.10/0.11	88.90/0.13	84.80/0.15	91.90/0.08	—	66.10/0.86	55.00/1.28	34.60/1.96	47.10/1.70
Albanian	46.20/1.41	46.20/1.41	46.30/1.38	65.50/1.01	60.70/1.44	26.50/3.21	—	10.50/3.78	3.30/6.25	3.40/6.60	2.00/7.59
Arabic	47.00/1.63	47.00/1.63	37.20/2.76	0.00/7.80	39.50/1.83	22.60/3.23	—	0.00/10.78	5.10/3.63	22.30/2.85	0.00/8.80
Armenian	58.70/1.00	58.70/1.00	58.00/1.13	77.40/0.53	71.00/0.55	63.40/1.06	—	12.30/3.18	9.80/3.67	8.30/4.11	8.00/4.29
Asturian	87.80/0.22	88.60/0.22	86.40/0.27	89.60/0.21	89.10/0.25	82.50/0.35	—	49.70/1.01	40.10/1.26	51.80/0.89	26.20/1.68
Azeri	56.00/0.89	56.00/0.89	65.00/0.83	81.00/0.40	50.00/1.91	89.00/0.20	—	11.00/2.36	54.00/1.10	46.00/1.34	34.00/1.74
Bashkir	92.40/0.14	91.50/0.17	93.20/0.21	93.70/0.13	72.30/0.66	93.90/0.12	—	65.40/0.84	59.40/1.03	51.40/1.17	45.20/1.53
Basque	37.70/1.38	37.70/1.38	34.20/1.60	10.40/3.73	1.80/5.63	0.70/3.17	—	49.40/1.17†	1.40/4.21	2.70/3.82	2.40/4.11
Belarusian	52.40/1.41	52.40/1.41	45.40/1.69	41.60/2.03	21.70/2.09	16.60/2.82	—	13.00/2.84	26.90/2.59	20.60/2.82	15.40/3.25
Bengali	87.00/0.32	87.00/0.32	85.00/0.39	83.00/0.37	76.00/0.33	72.00/0.37	—	66.00/0.82	43.00/1.04	45.00/1.09	46.00/1.04
Breton	88.00/0.33	90.00/0.26	**93.00/0.20**‡	70.00/0.69	67.00/1.09	81.00/0.33	—	66.00/0.67	42.00/1.21	55.00/0.71	30.00/1.59
Bulgarian	58.00/0.71	58.00/0.71	59.70/0.86	75.80/0.36	70.60/0.49	52.60/1.27	—	32.10/2.05	22.90/2.80	17.10/3.20	20.60/3.11
Catalan	84.50/0.29	84.20/0.33	88.10/0.21	86.10/0.27	85.70/0.31	79.50/0.37	—	23.30/1.99	37.30/1.47	43.40/1.28	14.10/2.36
Classical-syriac	**98.00/0.03**‡	**98.00/0.03**‡	**96.00/0.05**‡	91.00/0.09	**99.00/0.01**‡	**100.00/0.00**‡	—	81.00/0.26	67.00/0.45	71.00/0.30	90.00/0.11
Cornish	20.00/2.20	28.00/1.96	32.00/1.80	—	12.00/2.94	32.00/1.54	2.00/3.54	34.00/1.70	20.00/1.76	26.00/1.70	10.00/3.46
Crimean-tatar	**94.00/0.11**‡	**92.00/0.11**	**94.00/0.19**‡	90.00/0.19	78.00/0.31	**97.00/0.05**‡	—	61.00/0.93	50.00/1.31	52.00/1.17	58.00/1.11
Czech	35.50/1.47	35.70/1.73	32.90/1.69	69.00/0.70	79.70/0.48	61.10/1.09	—	7.20/4.19	10.50/3.61	17.40/3.13	8.60/4.20
Danish	72.10/0.46	71.90/0.45	71.50/0.56	70.90/0.47	77.60/0.37	72.00/0.41	—	31.30/1.97	24.00/2.65	30.80/2.39	27.90/2.21
Dutch	66.40/0.53	66.40/0.53	66.10/0.72	73.90/0.42	72.70/0.45	61.20/0.69	—	—	16.30/2.73	25.60/2.21	14.30/2.85
English	90.40/0.15	90.40/0.15	89.60/0.16	92.60/0.11	90.50/0.15	89.00/0.15	—	—	29.30/2.05	28.10/2.32	26.10/2.14
Estonian	31.70/1.57	31.70/1.57	27.00/1.98	59.90/0.81	62.70/0.77	36.10/1.82	—	8.30/3.48	14.60/3.86	3.40/4.84	3.70/5.09
Faroese	48.90/1.04	46.80/1.11	50.70/1.05	45.80/1.28	65.30/0.77	47.00/1.01	—	12.50/2.67	13.10/2.72	19.80/2.38	13.80/2.64
Finnish	31.70/1.88	31.70/1.88	26.20/2.34	51.20/1.04	44.20/1.53	21.40/3.01	—	0.00/8.23	0.20/7.52	1.20/7.45	1.10/8.10
French	73.40/0.47	73.40/0.47	74.60/0.45	74.60/0.46	73.10/0.47	66.90/0.66	—	—	14.50/2.58	29.80/2.04	22.30/2.39
Friulian	91.00/0.11	91.00/0.11	91.00/0.12	56.00/0.93	**92.00/0.11**	**94.00/0.11**‡	—	74.00/0.47	62.00/0.58	66.00/0.50	48.00/1.01
Galician	84.40/0.27	81.40/0.30	81.50/0.33	77.50/0.41	82.80/0.34	78.90/0.43	—	40.60/1.26	46.20/1.01	43.50/1.11	26.70/1.77
Georgian	90.20/0.31	90.20/0.31	91.50/0.33	91.10/0.22	92.10/0.21	91.40/0.30	—	35.40/1.72	30.50/2.09	43.90/1.53	28.10/2.33
German	67.50/0.79	67.50/0.79	66.00/0.95	73.50/0.57	71.60/0.71	67.60/0.80	—	—	12.10/3.72	14.10/3.58	11.90/3.64
Greek	14.90/2.65	15.10/2.34	16.40/3.21	52.90/1.16	59.30/1.03	34.40/2.27	—	4.20/4.51	5.90/4.82	4.50/5.21	4.90/5.45
Greenlandic	80.00/0.22	74.00/0.40	78.00/0.24	—	70.00/0.42	82.00/0.24	54.00/0.90	22.00/1.50	70.00/0.42	42.00/0.96	22.00/1.86
Haida	80.00/1.02	84.00/0.91	71.00/1.47	75.00/1.08	61.00/1.02	81.00/0.46	—	21.00/4.58	78.00/0.69	58.00/1.58	28.00/2.49
Hebrew	76.60/0.30	76.60/0.30	79.00/0.28	67.90/0.44	38.10/0.98	33.00/1.22	—	22.20/1.45	11.90/1.97	8.10/2.07	12.10/2.10
Hindi	87.40/0.30	87.40/0.30	86.40/0.47	94.80/0.08	87.20/0.18	74.40/0.53	—	71.80/1.02	47.30/1.68	52.20/1.54	0.80/3.28
Hungarian	58.60/0.83	58.60/0.83	51.10/1.35	65.30/0.77	44.40/1.42	56.80/0.82	—	1.50/4.83	5.90/4.34	7.80/3.95	2.40/4.92
Icelandic	51.70/0.94	51.70/0.94	49.90/1.06	44.20/1.15	58.80/0.83	44.90/1.04	—	10.80/2.79	11.60/3.04	16.30/2.64	9.70/2.99
Ingrian	78.00/0.36	**88.00/0.30**‡	**84.00/0.30**	—	46.00/0.86	80.00/0.30	44.00/1.28	68.00/0.54	46.00/0.88	36.00/1.00	24.00/1.40
Irish	45.40/1.75	45.40/1.75	43.30/1.92	47.90/1.68	44.10/1.57	19.50/3.79	—	3.00/5.48	1.70/6.88	3.70/6.84	4.20/7.16
Italian	77.50/0.44	78.30/0.43	79.10/0.45	87.30/0.23	72.50/0.81	50.60/1.56	—	10.90/3.02	13.20/3.08	1.50/5.54	11.40/3.74
Kabardian	**99.00/0.01**‡	**99.00/0.01**‡	**100.00/0.00**‡	42.00/1.31	83.00/0.17	**97.00/0.03**‡	—	46.00/0.74	81.00/0.27	79.00/0.29	75.00/0.41
Kannada	73.00/0.64	74.00/0.81	78.00/0.61	59.00/1.26	55.00/1.30	81.00/0.30	—	—	20.00/2.64	19.00/2.22	20.00/2.90
Karelian	**96.00/0.12**‡	**96.00/0.12**‡	**96.00/0.10**‡	—	42.00/1.00	**98.00/0.02**‡	62.00/0.90	60.00/1.24	58.00/0.80	50.00/0.82	26.00/1.42
Kashubian	**78.00/0.30**	**78.00/0.30**	**88.00/0.20**‡	—	68.00/0.58	60.00/0.64	**76.00/0.38**	6.00/2.12	74.00/0.38	56.00/0.70	32.00/1.36
Kazakh	24.00/1.42	24.00/1.42	4.00/5.68	—	48.00/1.14	**86.00/0.14**‡	44.00/1.08	16.00/1.74	0.00/4.34	44.00/0.66	38.00/0.88
Khakas	**98.00/0.02**‡	**98.00/0.02**‡	**98.00/0.04**‡	—	84.00/0.36	**96.00/0.06**‡	**96.00/0.06**‡	32.00/1.56	62.00/0.60	60.00/0.50	66.00/0.54
Khaling	62.20/0.97	53.80/1.33	56.20/1.28	15.30/2.59	18.00/2.01	5.30/2.56	—	27.20/2.09	5.50/3.65	6.80/3.42	5.40/3.86
Kurmanji	80.30/0.76	80.30/0.76	83.30/0.89	88.70/0.21	85.10/0.28	86.70/0.43	—	26.30/2.38	20.30/2.71	32.40/2.40	15.70/3.12
Ladin	**92.00/0.14**	**88.00/0.25**	**90.00/0.17**	79.00/0.33	86.00/0.35	77.00/0.37	—	62.00/0.57	67.00/0.53	63.00/0.63	24.00/1.77
Latin	22.60/2.05	22.60/2.05	22.60/2.32	27.90/1.63	37.90/1.16	11.20/2.31	—	2.60/3.91	2.90/4.00	5.20/3.40	3.20/4.18
Latvian	72.60/0.65	72.60/0.65	64.40/0.98	82.40/0.38	85.50/0.26	79.90/0.54	—	9.70/3.25	19.50/2.77	23.30/2.41	6.40/3.68
Lithuanian	26.70/1.77	26.50/1.64	23.60/2.13	39.50/1.17	52.00/0.70	25.20/1.59	—	3.60/3.36	18.20/2.29	12.20/2.56	3.40/3.54
Livonian	46.00/1.14	46.00/1.14	44.00/1.25	59.00/1.04	51.00/1.36	52.00/1.23	—	23.00/2.13	42.00/1.68	5.00/4.25	13.00/3.21
Lower-sorbian	69.30/0.54	69.30/0.54	65.70/0.64	57.90/0.88	68.90/0.60	68.60/0.52	—	15.50/2.06	27.30/1.61	29.70/1.38	20.30/1.85
Macedonian	71.50/0.47	71.50/0.47	71.50/0.50	73.80/0.37	82.60/0.32	79.50/0.32	—	14.20/2.38	18.00/2.38	20.40/2.43	21.20/2.37
Maltese	83.00/0.33	83.00/0.33	**90.00/0.15**	57.00/0.90	21.00/1.71	24.00/1.61	—	57.00/0.88	18.00/2.27	17.00/2.29	4.00/3.16
Mapudungun	**98.00/0.02**‡	**98.00/0.02**‡	**98.00/0.02**‡	—	82.00/0.20	**98.00/0.02**‡	**90.00/0.24**‡	**94.00/0.12**‡	52.00/0.86	54.00/0.78	32.00/1.38
Middle-french	85.40/0.32	85.40/0.32	90.20/0.22	93.10/0.14	90.20/0.18	86.00/0.32	—	54.70/1.09	61.30/0.97	19.90/2.51	31.40/1.74
Middle-high-german	66.00/0.72	66.00/0.72	**96.00/0.04**‡	—	54.00/0.66	52.00/0.88	84.00/0.26	78.00/0.34	40.00/1.00	48.00/0.84	30.00/1.40
Middle-low-german	86.00/0.30	86.00/0.30	**98.00/0.04**‡	—	38.00/1.44	30.00/1.38	76.00/0.64	—	58.00/1.10	60.00/1.06	36.00/1.92
Murrinhpatha	**84.00/0.38**	**90.00/0.26**‡	**90.00/0.26**‡	—	22.00/2.04	4.00/1.86	54.00/1.14	62.00/0.94	6.00/2.88	4.00/3.10	8.00/2.68
Navajo	30.30/2.13	30.30/2.13	33.60/2.26	29.60/2.10	30.40/2.49	4.30/5.01	—	9.10/3.40	3.00/4.36	3.10/4.41	0.80/5.44
Neapolitan	**98.00/0.06**‡	**98.00/0.06**‡	**98.00/0.06**‡	93.00/0.14	**94.00/0.17**‡	**96.00/0.09**‡	—	76.00/0.65	78.00/0.38	65.00/0.56	39.00/1.18
Norman	32.00/1.98	32.00/1.98	44.00/1.70	—	46.00/2.02	34.00/1.56	28.00/2.62	14.00/2.58	30.00/1.80	24.00/1.86	6.00/2.88
North-frisian	72.00/0.59	72.00/0.59	69.00/0.72	42.00/2.73	33.00/2.85	29.00/2.52	—	—	14.00/4.07	20.00/3.61	3.00/5.09
Northern-sami	44.60/1.22	44.60/1.22	47.50/1.42	33.00/2.02	34.90/1.38	23.10/1.72	—	8.30/3.63	13.10/2.61	8.20/2.70	2.60/3.85
Norwegian-bokmaal	77.00/0.38	77.00/0.38	77.30/0.43	81.40/0.29	80.50/0.31	77.30/0.34	—	26.70/2.13	28.50/2.33	28.30/2.36	29.40/1.84
Norwegian-nynorsk	56.90/0.70	56.90/0.70	58.60/0.70	57.20/0.71	60.50/0.65	54.40/0.77	—	15.20/2.40	18.00/2.54	19.80/2.64	20.60/2.08
Occitan	82.00/0.35	82.00/0.35	69.00/0.61	79.00/0.44	**92.00/0.16**‡	84.00/0.24	—	41.00/1.26	62.00/0.69	59.00/0.60	14.00/2.14
Old-armenian	42.10/1.32	42.20/1.23	43.30/1.27	41.00/1.41	67.30/0.71	55.00/0.93	—	13.00/2.34	14.00/2.31	24.40/1.95	17.20/2.40
Old-church-slavonic	**87.00/0.22**	**87.00/0.22**	**86.00/0.22**	63.00/0.85	77.00/0.51	83.00/0.22	—	39.00/0.94	54.00/0.67	49.00/0.67	47.00/0.82
Old-english	37.70/1.27	35.30/1.63	37.30/1.52	46.10/1.04	27.70/1.29	18.00/1.88	—	—	23.60/2.06	24.00/1.98	10.70/2.57
Old-french	60.50/0.83	58.60/0.77	62.60/0.78	56.00/0.98	63.00/0.74	55.80/0.89	—	20.20/2.02	27.40/1.79	27.10/1.80	18.40/2.17
Old-irish	6.00/3.26	6.00/3.26	6.00/3.46	—	16.00/3.80	8.00/2.94	8.00/2.82	6.00/3.26	8.00/3.22	6.00/3.50	4.00/3.96
Old-saxon	61.50/0.65	61.50/0.65	48.80/1.06	38.30/1.27	39.10/1.02	31.60/1.25	—	19.40/1.88	21.50/1.78	18.80/1.87	11.10/2.31
Pashto	65.00/0.67	65.00/0.67	70.00/0.59	46.00/1.51	68.00/0.71	57.00/0.77	—	43.00/1.02	18.00/1.82	7.00/3.29	18.00/2.46
Persian	72.60/0.73	72.60/0.73	76.30/0.52	80.40/0.35	66.50/1.01	49.90/1.80	—	48.80/1.63	37.50/2.83	29.40/3.38	1.30/5.04
Polish	49.70/1.21	49.70/1.21	49.40/1.20	62.60/0.90	73.50/0.64	60.80/0.99	—	—	9.50/3.61	7.50/3.92	9.60/3.73
Portuguese	89.30/0.17	88.60/0.19	80.80/0.31	89.10/0.18	92.40/0.13	84.30/0.24	—	26.30/1.78	35.60/1.50	11.90/2.76	22.90/1.98
Quechua	80.80/0.53	80.80/0.53	79.70/0.60	69.30/1.13	70.90/1.49	95.90/0.09†	—	21.00/3.08	48.60/1.33	1.90/6.31	21.70/2.92
Romanian	61.40/1.03	61.40/1.03	59.70/1.04	56.60/1.14	69.30/0.75	47.20/1.72	—	12.70/3.34	13.70/3.68	15.90/3.51	5.60/4.20
Russian	51.70/1.16	51.70/1.16	51.80/1.47	66.70/0.72	76.40/0.52	56.70/1.09	—	—	8.50/4.04	1.80/5.44	9.60/4.14
Sanskrit	64.80/0.70	64.80/0.70	65.30/0.71	36.50/2.33	60.10/0.76	76.30/0.37	—	14.10/2.48	21.70/2.05	21.50/1.76	26.50/1.98
Scottish-gaelic	**90.00/0.16**‡	**90.00/0.16**‡	**88.00/0.22**‡	—	50.00/0.74	50.00/1.30	70.00/0.74	56.00/0.74	48.00/0.96	52.00/0.88	36.00/1.66
Serbo-croatian	38.60/1.26	38.60/1.26	30.30/1.87	58.10/1.01	68.20/0.77	47.20/1.58	—	7.70/4.18	10.90/4.20	10.80/4.16	5.00/4.55
Slovak	56.60/0.73	56.60/0.73	58.00/0.85	53.50/0.95	71.30/0.53	62.30/0.64	—	10.50/2.12	21.80/1.72	26.90/1.46	17.60/1.79
Slovene	68.70/0.56	68.70/0.56	55.00/1.01	43.60/0.76	72.30/0.46	73.30/0.47	—	0.20/8.25	29.90/1.86	34.40/1.60	8.30/3.26
Sorani	40.30/1.35	40.10/1.44	46.10/1.19	28.40/2.35	52.10/1.05	15.50/2.66	—	30.70/1.80	6.40/3.58	6.60/3.70	1.60/4.42
Spanish	82.30/0.38	82.30/0.38	79.40/0.51	85.70/0.26	86.50/0.35	73.10/0.85	—	28.10/2.04	25.20/2.52	21.90/2.95	20.10/2.63
Swahili	84.00/0.34	86.00/0.27	85.00/0.35	77.00/0.42	73.00/0.37	1.00/3.21	—	72.00/0.59	1.00/3.35	3.00/3.30	1.00/4.16
Swedish	68.70/0.53	69.10/0.53	70.00/0.54	76.20/0.36	76.40/0.41	69.50/0.50	—	11.10/3.05	13.90/3.48	2.70/4.93	19.00/2.99
Tatar	92.00/0.10	92.00/0.10	90.00/0.17	**95.00/0.05**‡	90.00/0.14	92.00/0.08	—	53.00/1.30	62.00/1.12	57.00/1.11	52.00/1.34
Tibetan	26.00/1.30	26.00/1.30	30.00/1.40	—	36.00/1.00	42.00/1.00	44.00/0.88	24.00/1.32	26.00/1.24	38.00/1.04	**42.00/0.94**
Turkish	38.30/2.06	38.30/1.78	36.50/2.31	80.50/0.55	32.20/2.95	73.70/0.51	—	9.30/4.03	20.70/2.92	18.90/3.18	12.60/4.37
Turkmen	**96.00/0.04**‡	**94.00/0.06**‡	**96.00/0.06**‡	—	68.00/0.64	**94.00/0.06**‡	**96.00/0.04**‡	48.00/0.68	70.00/0.36	82.00/0.22	66.00/0.62
Ukrainian	66.80/0.62	66.80/0.62	61.10/0.72	69.20/0.61	74.00/0.49	62.70/0.66	—	14.50/2.20	19.10/2.10	25.20/1.94	20.40/2.23
Urdu	85.90/0.42	82.90/0.53	83.90/0.54	87.20/0.46	87.00/0.23	78.20/0.46	—	80.70/0.80	53.60/1.55	45.50/1.58	2.70/3.38
Uzbek	**100.00/0.00**‡	**100.00/0.00**‡	**100.00/0.00**‡	89.00/0.18	**96.00/0.04**‡	**100.00/0.00**‡	—	14.00/3.03	63.00/0.62	59.00/0.73	66.00/0.93
Venetian	86.40/0.18	81.10/0.31	82.20/0.28	70.60/0.40	88.90/0.16	89.80/0.17	—	45.40/1.27	56.00/0.74	58.40/0.69	20.10/1.81
Votic	78.00/0.37	79.00/0.38	79.00/0.37	19.00/2.05	37.00/1.39	64.00/0.48	—	59.00/0.78	45.00/0.94	39.00/1.03	21.00/1.62
Welsh	**81.00/0.38**	**79.00/0.36**	**85.00/0.29**‡	56.00/0.98	58.00/1.01	62.00/0.68	—	23.00/1.80	41.00/1.06	46.00/1.03	9.00/2.20
West-frisian	91.00/0.27	91.00/0.25	**92.00/0.26**	60.00/0.79	65.00/0.81	67.00/0.53	—	76.00/0.44	48.00/1.13	53.00/0.96	28.00/1.56
Yiddish	79.00/0.37	80.00/0.30	84.00/0.28	80.00/0.31	**87.00/0.22**	78.00/0.39	—	62.00/0.87	56.00/1.01	63.00/0.96	39.00/1.51
Zulu	60.00/0.93	60.00/0.93	54.00/1.05	67.40/0.78	53.60/0.98	1.70/3.34	—	15.80/2.42	1.20/3.73	1.50/4.41	0.80/5.04

Table 16: Task 1 Medium Condition Part 2.

	oracle-fc	oracle-e	axsemantics-01	uzh-02	uzh-01	ua-08	iitbhu-iiith-02	ua-05	iitbhu-iiith-01	ua-06	ua-03	waseda-01
Adyghe	98.30/*	98.40/*	—	**90.30/0.10**	**90.00/0.10**	**90.60/0.14**	**89.10/0.17**	82.10/0.22	85.50/0.21	88.90/0.17	81.00/0.23	73.10/0.51
Albanian	54.80/*	54.90/*	—	**35.70/1.89**	**36.40/1.87**	20.50/4.00	29.70/2.00	21.80/4.35	26.40/2.20	20.30/4.02	18.90/3.03	24.40/4.82
Arabic	54.20/*	57.40/*	—	**44.30/1.80**	**45.20/1.77**	35.80/2.24	35.20/2.04	19.80/5.28	31.90/2.19	35.50/2.23	0.10/6.27	27.60/3.33
Armenian	55.30/*	76.20/*	—	**64.60/0.82**†	**64.90/0.77**†	49.10/1.73	54.40/0.92	50.50/1.51	51.60/1.02	43.30/1.91	49.90/1.53	37.00/2.18
Asturian	65.20/*	82.80/*	—	**74.60/0.47**†	72.50/0.52†	58.00/0.95	70.30/0.55†	67.90/0.83	66.30/0.62	56.80/1.00	57.00/1.05	58.60/1.06
Azeri	71.00/*	79.00/*	—	**62.00/0.82**	**62.00/0.86**	46.00/1.31	**65.00/0.76**	48.00/1.17	**63.00/0.81**	24.00/2.62	36.00/1.63	39.00/1.35
Bashkir	98.00/*	94.90/*	—	70.10/0.51	67.20/0.53	**77.50/0.48**	**77.20/0.44**	42.90/1.10	**77.80/0.44**	61.90/1.42	42.10/1.11	39.40/1.84
Basque	5.60/*	31.20/*	—	**12.70/3.05**†	**13.30/2.98**†	**11.40/3.29**†	**11.80/3.02**†	6.70/3.88	9.60/3.13†	10.50/3.34†	3.30/3.96	6.50/3.70
Belarusian	86.30/*	54.80/*	—	**30.20/2.18**	30.00/2.16	**33.40/1.97**	22.90/2.35	16.20/2.52	21.20/2.45	31.30/2.04	16.20/2.52	10.30/2.72
Bengali	83.00/*	91.00/*	—	**72.00/0.49**	**71.00/0.53**	**68.00/1.00**	58.00/0.83	62.00/0.63	55.00/0.88	**64.00/1.16**	59.00/0.90	52.00/0.76
Breton	74.00/*	86.00/*	—	**71.00/0.76**	**72.00/0.78**	**69.00/0.92**	61.00/0.95	**69.00/0.85**	61.00/0.93	**67.00/0.99**	**66.00/0.90**	61.00/0.99
Bulgarian	66.10/*	80.90/*	—	58.50/0.70	58.20/0.70	**62.90/1.02**	54.00/0.81	50.40/0.97	51.50/0.89	**62.40/1.02**	49.30/0.98	50.00/0.90
Catalan	86.90/*	87.40/*	—	**69.90/0.57**	68.50/0.60	**72.50/0.65**	64.40/0.65	62.80/0.79	61.80/0.70	**71.60/0.68**	60.50/0.82	60.80/0.86
Classical-syriac	95.00/*	98.00/*	—	**96.00/0.04**‡	**96.00/0.04**‡	**94.00/0.06**‡	**92.00/0.09**	**95.00/0.06**‡	**91.00/0.10**	**93.00/0.07**‡	**94.00/0.06**‡	**94.00/0.06**‡
Cornish	68.00/*	58.00/*	—	24.00/1.82	**28.00/1.56**	**38.00/1.40**	**30.00/1.68**	**40.00/1.56**	22.00/1.82	6.00/2.80	14.00/2.90	12.00/3.62
Crimean-tatar	98.00/*	98.00/*	—	**89.00/0.15**	**89.00/0.15**	**89.00/0.17**	**91.00/0.14**	81.00/0.25	**89.00/0.17**	**85.00/0.21**	71.00/0.39	67.00/0.43
Czech	56.70/*	58.30/*	—	**46.50/1.97**	**46.50/1.80**	40.00/2.09	37.00/1.51	42.30/1.80	33.80/1.68	40.00/2.09	39.80/1.83	39.30/2.14
Danish	96.20/*	91.10/*	—	69.90/0.51	70.00/0.50	**87.20/0.24**	65.20/0.58	68.20/0.49	65.80/0.58	**87.70/0.24**	68.10/0.48	64.70/0.67
Dutch	95.20/*	80.80/*	—	55.20/0.71	56.00/0.70	**68.90/0.60**	58.60/0.62	56.00/0.70	57.60/0.65	**69.30/0.62**	55.30/0.74	53.70/0.86
English	100.00/*	92.90/*	—	90.30/0.14	90.30/0.14	**91.80/0.16**	86.50/0.20	89.80/0.15	81.30/0.28	**91.80/0.16**	89.90/0.15	80.80/0.26
Estonian	70.30/*	62.20/*	—	33.60/1.49	**35.20/1.36**	**33.30/2.17**	**33.00/1.59**	28.70/1.73	29.00/1.72	31.80/2.22	29.00/1.74	30.80/1.79
Faroese	85.70/*	68.90/*	—	43.40/1.18	45.90/1.12	**49.80/1.20**	33.00/1.37	43.10/1.14	27.60/1.51	**49.30/1.22**	39.20/1.25	39.70/1.50
Finnish	58.10/*	39.80/*	—	**24.90/2.05**	**25.70/2.01**	20.00/3.29	19.90/2.31	21.30/2.90	19.00/2.37	19.30/3.31	20.80/2.91	19.50/2.59
French	85.50/*	78.50/*	—	**66.60/0.61**	65.20/0.61	60.80/1.03	55.00/0.83	59.00/0.96	53.10/0.90	58.90/1.08	55.60/0.76	58.90/0.97
Friulian	89.00/*	85.00/*	—	**79.00/0.39**	**79.00/0.36**	70.00/0.41	72.00/0.64	**75.00/0.59**	70.00/0.63	69.00/0.52	68.00/0.64	70.00/0.52
Galician	73.00/*	72.40/*	—	**61.10/0.72**	**60.80/0.70**	47.60/1.17	48.40/0.94	53.70/1.21	43.50/1.09	41.80/1.39	50.30/1.24	53.00/1.22
Georgian	93.80/*	92.40/*	—	84.50/0.35	84.00/0.34	**88.20/0.30**	80.40/0.41	83.00/0.38	77.70/0.46	**87.50/0.33**	83.40/0.38	70.60/0.58
German	79.60/*	85.60/*	—	62.00/0.78	62.40/0.76	55.00/1.14	57.00/0.93	59.30/0.83	53.50/1.00	55.00/1.14	**67.10/0.69**	52.00/1.04
Greek	57.70/*	49.00/*	—	**32.20/1.93**	**32.30/1.83**	23.90/2.89	27.10/1.96	28.90/2.32	26.10/2.01	23.40/2.90	26.90/2.36	25.10/2.71
Greenlandic	100.00/*	96.00/*	—	**74.00/0.48**	**74.00/0.42**	**68.00/0.48**	**72.00/0.36**	**68.00/0.42**	**80.00/0.30**	66.00/0.42	**64.00/0.50**	52.00/2.74
Haida	45.00/*	77.00/*	—	**63.00/1.42**†	**60.00/1.77**†	20.00/4.47	**57.00/1.45**	49.00/2.07	48.00/1.86	20.00/4.47	10.00/4.94	29.00/5.64
Hebrew	82.40/*	71.80/*	—	39.90/1.02	39.10/1.02	**56.70/0.91**	34.30/1.12	35.40/1.04	32.40/1.19	**56.40/0.92**	37.20/1.03	26.00/1.46
Hindi	38.80/*	85.80/*	—	**78.00/0.79**†	**78.00/0.68**†	45.80/1.57†	**75.90/0.89**†	70.80/1.17†	75.10/0.90†	39.60/1.66	49.40/1.22†	59.60/1.19†
Hungarian	78.90/*	65.40/*	—	41.30/1.19	40.30/1.18	**48.20/1.41**	39.20/1.35	33.10/1.37	33.50/1.54	**47.90/1.42**	28.00/1.58	25.90/1.83
Icelandic	92.20/*	71.80/*	—	48.90/1.04	48.20/1.01	**56.20/0.94**	31.70/1.39	42.60/1.16	29.30/1.49	**55.50/0.95**	40.60/1.19	38.90/1.49
Ingrian	100.00/*	66.00/*	—	**36.00/1.58**	**36.00/1.34**	20.00/1.78	**46.00/1.10**	**32.00/1.14**	34.00/1.32	**38.00/0.92**	26.00/1.36	4.00/2.88
Irish	82.70/*	50.40/*	—	**37.60/2.18**	**37.70/2.09**	35.30/2.40	26.00/2.58	34.80/2.11	22.30/2.74	35.50/2.38	35.10/2.13	34.10/3.03
Italian	82.80/*	73.80/*	—	**57.40/1.02**	**57.00/1.17**	47.80/1.64	47.30/1.07	42.20/2.06	45.40/1.09	46.50/1.71	38.40/1.97	42.20/2.05
Kabardian	99.00/*	100.00/*	—	**90.00/0.10**	**92.00/0.08**	**88.00/0.21**	**87.00/0.13**	**86.00/0.18**	84.00/0.16	**86.00/0.25**	**84.00/0.20**	75.00/0.32
Kannada	74.00/*	78.00/*	—	**60.00/0.80**	**61.00/0.79**	38.00/2.14	**57.00/0.89**	**57.00/1.10**	**55.00/0.92**	37.00/2.14	31.00/2.40	36.00/2.10
Karelian	88.00/*	98.00/*	—	**88.00/0.20**‡	**88.00/0.16**‡	70.00/0.60	**92.00/0.14**‡	**94.00/0.10**‡	**90.00/0.18**‡	56.00/0.78	64.00/0.70	46.00/2.54
Kashubian	100.00/*	82.00/*	—	**64.00/0.72**	**66.00/0.72**	44.00/1.16	**58.00/0.88**	**68.00/0.70**	52.00/1.14	**58.00/0.76**	54.00/1.08	56.00/0.90
Kazakh	100.00/*	92.00/*	—	**86.00/0.14**‡	**80.00/0.20**	62.00/0.50	**78.00/0.22**	**76.00/0.30**	**84.00/0.16**‡	34.00/1.48	42.00/0.94	38.00/2.18
Khakas	100.00/*	92.00/*	—	**78.00/0.26**	**78.00/0.28**	70.00/0.64	**86.00/0.16**‡	56.00/0.54	**80.00/0.24**	42.00/0.92	54.00/0.56	36.00/1.96
Khaling	22.00/*	53.20/*	—	22.30/2.13	23.00/2.04	**33.80/2.32**†	24.50/1.83	15.50/2.14	19.20/2.01	30.50/2.44†	15.50/2.14	12.10/2.89
Kurmanji	90.20/*	89.20/*	—	**87.40/0.64**	**87.10/0.34**	84.00/0.44	80.80/0.55	**87.20/0.35**	75.20/0.64	84.00/0.44	**86.70/0.35**	86.20/0.43
Ladin	77.00/*	83.00/*	—	**71.00/0.55**	**72.00/0.52**	59.00/0.80	**68.00/0.62**	**67.00/1.03**	**64.00/0.68**	58.00/0.80	55.00/0.89	58.00/0.96
Latin	52.30/*	42.00/*	—	17.10/2.42	17.70/2.32	**33.00/1.84**	15.30/2.48	16.90/2.46	14.00/2.52	**33.10/1.84**	17.40/2.44	16.10/2.84
Latvian	80.10/*	70.90/*	—	54.50/1.00	54.50/1.16	55.90/0.97	35.90/1.43	**56.00/1.41**	36.40/1.43	**57.30/0.96**	52.00/1.04	52.80/0.87
Lithuanian	65.40/*	44.30/*	—	20.70/1.84	20.40/1.78	**32.40/1.97**	16.90/1.91	23.20/1.87	14.50/2.03	**32.60/1.97**	19.20/2.15	23.00/1.89
Livonian	73.00/*	53.00/*	—	**33.00/1.69**	**32.00/1.69**	**35.00/1.60**	**33.00/1.86**	**30.00/1.67**	**32.00/1.88**	**34.00/1.73**	**29.00/1.68**	**29.00/2.21**
Lower-sorbian	75.90/*	77.00/*	—	45.60/1.04	46.20/1.02	**54.20/1.08**	40.90/1.15	48.70/0.98	37.50/1.23	**54.30/1.10**	50.50/0.97	36.30/1.38
Macedonian	79.20/*	85.90/*	—	59.80/0.61	60.20/0.60	**67.60/0.63**	57.40/0.60	56.50/0.68	53.70/0.65	**68.80/0.62**	54.20/0.76	49.80/0.89
Maltese	99.00/*	69.00/*	—	**40.00/1.16**	**39.00/1.12**	**48.00/1.02**	32.00/1.31	18.00/1.64	24.00/1.43	**49.00/0.96**	18.00/1.64	20.00/1.96
Mapudungun	88.00/*	100.00/*	—	**78.00/0.34**	**80.00/0.36**	**84.00/0.38**	**84.00/0.28**	**86.00/0.24**	**84.00/0.28**	70.00/0.60	**76.00/0.46**	68.00/1.64
Middle-french	86.70/*	93.40/*	—	**84.50/0.32**	83.10/0.34	74.50/0.66	**83.10/0.34**	81.40/0.36	82.60/0.39	68.80/0.67	74.20/0.55	76.90/0.49
Middle-high-german	94.00/*	90.00/*	—	**84.00/0.30**‡	**82.00/0.34**‡	58.00/0.80	70.00/0.62	36.00/2.46	70.00/0.62	32.00/0.98	38.00/0.94	52.00/1.76
Middle-low-german	92.00/*	64.00/*	—	**50.00/1.34**	**54.00/1.28**‡	24.00/2.26	**42.00/1.44**	34.00/1.32	36.00/1.50	30.00/1.54	34.00/1.32	18.00/2.84
Murrinhpatha	98.00/*	64.00/*	—	**36.00/1.48**	**36.00/1.36**	**38.00/1.68**	**34.00/1.66**	**38.00/1.58**	**36.00/1.66**	**26.00/1.72**	**38.00/1.58**	34.00/2.24
Navajo	88.90/*	30.00/*	—	**19.80/3.42**	**20.80/2.96**	12.10/3.75	10.30/3.46	8.00/6.97	8.80/3.58	12.00/3.75	13.70/3.99	16.10/3.75
Neapolitan	90.00/*	90.00/*	—	**89.00/0.28**‡	**86.00/0.31**‡	80.00/0.59	80.00/0.41	83.00/0.32	76.00/0.50	80.00/0.66	81.00/0.59	79.00/0.59
Norman	88.00/*	84.00/*	—	**52.00/0.92**	**54.00/0.88**	**58.00/1.16**	**64.00/0.70**	**66.00/0.66**	**64.00/1.00**	32.00/1.62	40.00/1.72	44.00/2.34
North-frisian	85.00/*	61.00/*	—	**42.00/2.23**	**40.00/2.29**	31.00/2.39	**45.00/2.11**	31.00/2.69	**38.00/2.12**	20.00/4.53	27.00/2.80	36.00/2.25
Northern-sami	69.10/*	50.70/*	—	20.70/2.02	21.10/1.90	**35.80/2.29**	15.40/2.33	16.80/2.35	12.30/2.48	34.00/2.34	14.80/2.54	16.40/2.35
Norwegian-bokmaal	99.30/*	94.10/*	—	79.10/0.32	78.70/0.33	89.30/0.21	69.60/0.47	78.30/0.35	68.40/0.51	**90.10/0.20**	76.80/0.37	73.30/0.40
Norwegian-nynorsk	98.30/*	89.30/*	—	56.70/0.73	56.80/0.74	**83.60/0.39**	54.80/0.79	57.30/0.70	52.30/0.85	**82.90/0.42**	56.50/0.72	54.60/0.81
Occitan	91.00/*	82.00/*	—	**77.00/0.49**‡	**76.00/0.52**	68.00/0.72	**72.00/0.55**	**71.00/1.24**	69.00/0.61	66.00/0.84	68.00/0.76	**72.00/0.82**
Old-armenian	47.40/*	59.70/*	—	**42.00/1.32**	**41.80/1.30**	32.90/1.50	29.70/1.58	36.10/1.70	24.30/1.77	31.10/1.53	31.20/1.46	30.50/1.79
Old-church-slavonic	97.00/*	76.00/*	—	**48.00/1.06**	**46.00/1.08**	**50.00/0.88**	**53.00/0.78**	42.00/1.11	**50.00/0.87**	**50.00/0.92**	34.00/1.20	40.00/1.14
Old-english	81.00/*	64.80/*	—	24.10/1.58	24.70/1.54	**46.50/1.11**	23.10/1.62	29.00/1.34	20.70/1.75	**46.40/1.11**	29.00/1.34	17.60/1.72
Old-french	65.80/*	68.70/*	—	**46.20/1.10**	**46.10/1.05**	36.30/1.48	39.50/1.23	34.90/1.67	36.70/1.32	34.80/1.53	32.90/1.78	36.00/1.31
Old-irish	46.00/*	16.00/*	—	**8.00/3.62**‡	**8.00/3.84**‡	**0.00/6.94**	**4.00/3.80**	**6.00/4.28**‡	**4.00/3.84**	**4.00/3.90**	**4.00/4.54**	**8.00/4.34**‡
Old-saxon	68.30/*	64.50/*	—	30.00/1.32	31.40/1.29	**46.50/1.06**	25.10/1.52	29.30/1.38	22.20/1.61	**46.60/1.06**	28.70/1.41	22.80/1.84
Pashto	59.00/*	65.00/*	—	**48.00/1.25**	**48.00/1.29**	36.00/1.59	35.00/1.30	37.00/1.70	33.00/1.34	36.00/1.57	33.00/1.75	31.00/2.26
Persian	54.70/*	81.10/*	—	**67.60/0.59**†	**67.50/0.55**†	35.30/2.25	61.60/0.81†	34.80/2.98	56.20/0.94	25.50/2.87	28.10/2.77	36.60/1.78
Polish	75.90/*	66.20/*	—	45.30/1.43	44.60/1.47	**49.10/1.87**	32.50/1.72	44.60/1.49	29.00/1.83	**49.40/1.86**	43.60/1.50	42.00/1.72
Portuguese	73.70/*	87.00/*	—	**75.80/0.40**	73.80/0.43	62.50/0.72	59.20/0.69	63.90/0.80	57.80/0.69	61.70/0.74	56.50/1.01	62.60/0.83
Quechua	21.40/*	88.70/*	—	**70.20/0.90**†	**69.00/0.93**†	62.00/1.21†	61.60/1.02†	50.80/1.42†	56.50/1.10†	36.20/2.98†	26.40/2.79†	33.50/2.35†
Romanian	79.40/*	65.10/*	—	**46.00/1.34**	**46.20/1.34**	**45.00/1.94**	35.50/1.83	**45.80/1.48**	32.80/1.94	**45.40/1.94**	40.40/1.58	**44.70/1.52**
Russian	80.20/*	71.50/*	—	**53.20/1.09**	**53.50/1.07**	49.90/1.33	42.10/1.36	47.40/1.14	39.20/1.42	50.20/1.34	44.60/1.18	47.00/1.27
Sanskrit	68.90/*	74.20/*	—	**56.80/0.90**	**58.00/0.93**	43.50/1.53	52.20/1.07	46.20/1.23	51.40/1.08	39.20/1.73	46.00/1.33	42.40/1.24
Scottish-gaelic	100.00/*	84.00/*	—	**68.00/0.62**	**70.00/0.58**	58.00/0.98	**74.00/0.50**‡	50.00/0.82	60.00/0.78	**62.00/0.94**	46.00/0.82	38.00/2.50
Serbo-croatian	34.50/*	62.80/*	—	**43.00/1.50**†	**43.50/1.53**†	29.50/2.38	35.10/1.56	**43.80/1.69**†	34.20/1.68	28.70/2.40	**44.80/1.70**†	29.30/1.88
Slovak	90.00/*	71.00/*	—	**51.80/0.96**	**51.10/0.97**	48.00/1.06	42.30/1.11	**51.30/1.00**	39.30/1.18	48.00/1.06	**49.00/1.02**	48.40/1.09
Slovene	70.80/*	79.70/*	—	**58.00/0.73**	**57.50/0.74**	54.10/0.82	48.60/0.88	46.00/0.96	42.90/0.96	53.10/0.84	30.80/1.19	34.10/1.27
Sorani	38.20/*	55.00/*	—	**38.90/1.55**	**40.10/1.32**	28.60/2.16	26.40/1.70	24.80/2.38	22.90/1.83	27.50/2.20	24.20/2.39	19.90/3.35
Spanish	82.70/*	79.10/*	—	68.90/0.80	67.80/0.66	**73.20/0.80**	57.20/0.79	68.60/0.76	53.50/0.87	**72.50/0.81**	64.90/0.81	61.80/1.08
Swahili	39.00/*	80.00/*	—	58.00/0.70†	58.00/0.73†	36.00/1.49	**72.00/0.51**†	33.00/1.57	**69.00/0.56**†	33.00/1.59	33.00/1.57	**70.00/0.51**†
Swedish	95.00/*	86.90/*	—	68.40/0.51	67.90/0.52	**79.00/0.40**	61.40/0.70	62.00/0.67	58.50/0.75	77.70/0.42	60.30/0.72	61.70/0.62
Tatar	98.00/*	96.00/*	—	**86.00/0.16**	**88.00/0.14**	**90.00/0.14**	**85.00/0.26**	72.00/0.35	79.00/0.32	**89.00/0.15**	66.00/0.44	67.00/0.44
Telugu	86.00/*	98.00/*	72.00/0.96	**96.00/0.12**‡	**92.00/0.24**‡	**96.00/0.12**‡	**96.00/0.16**‡	**96.00/0.06**‡	**94.00/0.22**‡	82.00/0.74	82.00/0.42	54.00/2.90
Tibetan	100.00/*	82.00/*	—	**52.00/0.78**	**52.00/0.76**	36.00/1.10	**48.00/0.80**	34.00/0.98	**58.00/0.62**	**54.00/0.66**	38.00/0.84	34.00/1.02
Turkish	39.60/*	55.10/*	—	**38.10/2.04**	**39.00/1.89**	22.60/2.99	**39.50/2.09**	27.50/2.53	37.50/2.13	11.80/5.16	12.20/3.67	26.70/2.79
Turkmen	100.00/*	96.00/*	—	**90.00/0.14**‡	**86.00/0.20**‡	60.00/1.00	**80.00/0.28**	**86.00/0.20**‡	**78.00/0.34**	68.00/0.46	72.00/0.44	50.00/2.06
Ukrainian	85.40/*	71.40/*	—	48.90/0.92	49.40/0.92	**56.50/0.92**	38.10/1.05	47.70/0.98	30.70/1.22	**57.10/0.92**	47.50/1.01	46.60/0.99
Urdu	41.30/*	82.80/*	—	**72.50/0.48**†	**71.90/0.48**†	50.70/1.56†	69.60/0.60†	66.50/0.74†	65.90/0.66†	33.90/1.67	44.90/1.07†	58.90/0.84†
Uzbek	75.00/*	98.00/*	—	**90.00/0.12**†	**92.00/0.10**†	85.00/0.29†	**91.00/0.14**†	77.00/0.31	**90.00/0.14**†	43.00/2.01	46.00/1.13	63.00/0.78
Venetian	88.50/*	88.80/*	—	**78.80/0.35**	**78.40/0.37**	76.80/0.42	75.90/0.38	73.80/0.35	74.10/0.40	76.40/0.43	71.50/0.56	71.80/0.55
Votic	94.00/*	55.00/*	—	**26.00/1.56**	**26.00/1.56**	**32.00/1.47**	**26.00/1.60**	21.00/1.55	23.00/1.69	**29.00/1.54**	19.00/1.57	17.00/1.88
Welsh	88.00/*	75.00/*	—	**55.00/1.08**	**55.00/1.01**	**50.00/1.40**	**50.00/1.12**	**48.00/1.11**	**45.00/1.27**	**51.00/1.35**	43.00/1.17	42.00/1.25
West-frisian	100.00/*	72.00/*	—	**53.00/1.04**	**56.00/1.01**	46.00/1.13	**51.00/1.05**	**51.00/1.17**	**48.00/1.08**	47.00/1.12	40.00/1.26	**50.00/1.23**
Yiddish	100.00/*	96.00/*	—	**82.00/0.31**	**83.00/0.30**	**87.00/0.23**	71.00/0.39	**82.00/0.30**	68.00/0.44	**82.00/0.29**	78.00/0.35	78.00/0.38
Zulu	43.50/*	54.10/*	—	**32.10/1.52**	**33.00/1.49**	29.30/1.62	29.80/1.60	20.10/1.91	27.70/1.73	29.30/1.62	20.10/1.91	**31.00/1.53**

Table 17: Task 1 Low Condition Part 1.

	msu-02	ua-02	hamburg-01	ua-07	baseline	ua-01	msu-04	msu-03	iit-varanasi-01	ua-04	axsemantics-02	tuebingen-oslo-02
Adyghe	82.50/0.23	—	82.00/0.22	83.20/0.26	59.00/0.46	59.00/0.46	52.00/0.94	3.70/3.21	57.80/0.66	40.00/1.61	13.40/1.47	0.90/5.25
Albanian	25.40/4.57	12.60/7.09	16.10/2.69	13.50/7.10	22.00/4.37	22.00/4.37	5.50/4.88	4.40/5.10	0.80/6.08	2.90/6.88	0.00/12.09	0.00/8.87
Arabic	1.20/4.39	25.50/4.04	23.50/2.52	20.40/2.99	25.60/2.98	25.60/2.98	0.10/25.85	0.00/22.93	0.80/5.30	0.40/6.74	0.00/10.78	0.30/6.16
Armenian	37.70/2.27	47.70/2.28	39.80/1.44	37.80/2.09	37.00/2.18	37.00/2.18	16.60/2.33	18.20/2.48	5.80/3.80	4.10/4.28	10.70/2.87	0.10/6.56
Asturian	58.00/1.08	58.90/0.96	64.50/0.64	45.80/1.03	58.60/1.06	58.60/1.06	51.10/1.02	43.00/1.18	23.90/1.62	22.30/2.39	9.80/1.96	1.80/4.14
Azeri	43.00/1.96	48.00/1.19	37.00/1.40	47.00/1.27	24.00/2.84	24.00/2.84	26.00/2.11	34.00/1.55	28.00/2.10	12.00/2.98	24.00/1.74	1.00/4.77
Bashkir	45.50/1.07	—	58.20/0.76	75.40/0.50	39.40/1.84	39.40/1.84	27.20/2.08	14.50/3.16	35.80/1.35	24.50/2.08	22.30/1.26	0.20/4.96
Basque	0.10/6.56	0.50/5.48	1.70/4.06	6.20/3.53	0.10/6.52	0.10/6.52	0.90/4.72	0.10/5.43	0.50/4.71	6.70/3.88	0.00/10.18	0.20/5.45
Belarusian	20.60/2.38	6.50/3.47	17.10/2.44	17.80/3.07	6.80/2.44	6.80/2.44	17.20/2.50	12.30/2.61	2.90/3.68	3.40/3.90	0.00/8.99	0.30/5.72
Bengali	51.00/1.22	59.00/0.71	48.00/1.13	45.00/1.27	50.00/1.24	50.00/1.24	26.00/1.76	23.00/1.85	26.00/2.25	27.00/2.47	4.00/2.44	1.00/3.40
Breton	21.00/2.73	62.00/1.02	34.00/1.31	52.00/0.96	20.00/2.58	20.00/2.58	29.00/1.60	27.00/2.04	30.00/1.52	50.00/1.13	1.00/3.27	10.00/2.82
Bulgarian	31.00/1.92	27.50/2.59	38.50/1.24	33.80/1.98	30.90/1.69	30.90/1.69	21.90/1.96	13.30/2.08	9.70/2.85	13.80/2.96	4.70/2.98	0.00/6.02
Catalan	59.20/1.01	55.20/0.83	54.60/0.84	58.10/0.83	60.80/0.86	60.80/0.86	51.00/1.15	29.60/1.33	25.70/1.62	17.10/2.28	0.00/9.15	0.80/5.16
Classical-syriac	**93.00/0.08**‡	**93.00/0.08**‡	**92.00/0.09**	55.00/0.70	**94.00/0.06**‡	**94.00/0.06**‡	86.00/0.17	73.00/0.34	62.00/0.47	55.00/0.75	71.00/0.39	19.00/1.82
Cornish	12.00/4.02	8.00/3.94	**22.00/2.40**	**38.00/1.40**	10.00/4.10	10.00/4.10	4.00/3.12	8.00/2.74	**32.00/1.56**	**40.00/1.56**	0.00/7.76	4.00/3.58
Crimean-tatar	78.00/0.30	78.00/0.28	80.00/0.25	77.00/0.34	57.00/0.73	57.00/0.73	70.00/0.51	64.00/0.61	51.00/0.75	31.00/1.64	59.00/0.52	0.00/4.88
Czech	38.70/2.13	33.80/2.88	31.80/1.86	—	38.50/2.08	38.50/2.08	24.60/2.35	20.10/2.40	8.10/3.28	0.00/9.74	8.80/2.81	0.00/7.13
Danish	61.70/0.61	66.70/0.54	65.10/0.55	63.20/0.56	58.30/0.76	58.30/0.76	58.40/0.74	58.60/0.68	40.90/0.99	26.40/2.17	33.10/1.04	0.10/6.28
Dutch	47.50/0.84	49.80/0.88	43.00/1.01	44.20/1.05	50.80/0.73	50.80/0.73	40.70/1.17	34.60/1.22	8.90/2.54	12.10/2.73	19.80/1.51	0.10/5.72
English	81.60/0.32	87.60/0.18	90.40/0.14	42.70/1.21	77.60/0.39	77.60/0.39	75.30/0.49	74.10/0.40	61.80/0.60	42.70/1.21	45.50/0.69	0.20/5.39
Estonian	22.30/2.61	16.80/5.18	13.40/2.47	17.50/3.60	21.50/2.60	21.50/2.60	7.20/3.49	8.80/3.91	2.60/4.12	0.60/10.40	0.00/10.34	0.00/8.92
Faroese	40.90/1.23	38.90/1.33	23.80/1.56	25.70/1.56	34.40/1.45	34.40/1.45	19.60/1.82	18.00/1.75	9.60/2.49	4.50/3.51	9.20/2.13	0.00/5.82
Finnish	16.30/4.29	14.70/8.11	12.40/2.87	7.40/5.36	17.20/3.98	17.20/3.98	4.50/5.56	4.20/5.83	0.60/6.86	0.00/14.30	2.90/5.65	0.00/11.02
French	54.90/1.14	56.60/0.92	51.80/0.98	50.70/0.98	58.90/0.97	58.90/0.97	43.60/1.30	41.30/1.27	13.40/2.33	9.00/3.17	16.30/1.97	0.00/7.53
Friulian	**73.00/0.70**	**73.00/0.60**	55.00/0.68	59.00/0.81	70.00/0.52	70.00/0.52	69.00/0.55	46.00/0.97	39.00/1.13	26.00/1.71	36.00/1.16	8.00/2.67
Galician	53.00/1.32	48.30/1.15	47.50/1.09	42.90/1.16	53.00/1.22	53.00/1.22	42.10/1.21	32.70/1.45	15.30/2.06	5.40/3.78	5.80/2.26	0.40/4.50
Georgian	63.90/0.67	75.30/1.02	70.70/0.58	75.20/0.54	70.60/0.58	70.60/0.58	58.20/0.86	59.50/0.80	23.80/1.69	22.80/1.86	47.50/0.83	0.10/5.23
German	50.40/1.09	53.20/0.93	44.70/1.04	41.50/1.25	49.20/1.18	49.20/1.18	39.40/1.20	37.90/1.24	19.90/1.81	11.40/3.03	18.70/1.99	0.00/6.72
Greek	23.80/3.12	22.40/4.31	23.60/2.30	12.70/4.48	25.10/2.71	25.10/2.71	17.90/2.61	16.90/2.81	2.40/4.61	0.00/10.32	9.70/3.49	0.00/8.82
Greenlandic	48.00/0.92	48.00/0.88	42.00/0.78	**68.00/0.48**	50.00/0.78	50.00/0.78	48.00/0.88	34.00/1.14	60.00/0.58	**68.00/0.58**	30.00/1.16	24.00/1.30
Haida	27.00/5.89	44.00/2.25	0.00/5.01	35.00/3.03	29.00/5.64	29.00/5.64	8.00/4.74	2.00/7.43	12.00/3.69	47.00/2.30	0.00/17.05	3.00/5.14
Hebrew	27.80/1.30	20.10/2.01	24.20/1.42	20.50/1.53	24.40/1.31	24.40/1.31	16.20/1.71	14.70/1.82	5.20/2.44	5.20/2.66	4.20/2.15	0.10/3.85
Hindi	31.50/3.92	70.10/1.26†	68.70/0.88†	34.20/2.94	31.80/3.87	31.80/3.87	41.10/1.98	33.40/2.89	23.20/2.55	18.50/3.33	8.20/2.82	4.20/4.78
Hungarian	28.20/1.74	32.30/1.42	21.60/1.82	24.40/1.70	17.50/2.28	17.50/2.28	10.00/2.64	10.90/2.69	4.70/2.87	1.70/4.66	2.20/2.72	0.00/8.30
Icelandic	36.60/1.45	36.60/1.25	31.00/1.38	29.20/1.48	35.10/1.54	35.10/1.54	23.20/1.73	21.90/1.74	8.50/2.53	4.90/3.66	12.80/2.27	0.00/5.83
Ingrian	26.00/1.80	**28.00/1.72**	14.00/1.90	20.00/1.78	20.00/1.78	20.00/1.78	20.00/1.82	20.00/1.82	24.00/1.54	26.00/1.46	6.00/2.94	2.00/3.64
Irish	32.70/2.46	18.20/6.13	30.40/2.43	11.40/4.79	30.30/2.80	30.30/2.80	20.00/2.99	26.70/2.65	1.30/6.82	5.00/5.08	14.70/4.68	0.00/9.73
Italian	43.90/1.87	40.40/2.53	43.10/1.44	29.90/2.31	40.50/2.16	40.50/2.16	28.50/1.82	22.60/1.79	11.00/3.49	9.00/3.91	0.00/11.23	0.10/6.90
Kabardian	**89.00/0.13**	—	83.00/0.19	**86.00/0.18**	72.00/0.30	72.00/0.30	62.00/0.65	52.00/1.29	56.00/0.64	47.00/1.25	42.00/0.83	12.00/2.85
Kannada	37.00/1.95	**56.00/1.08**	37.00/1.41	34.00/2.04	33.00/2.09	33.00/2.09	14.00/2.38	24.00/1.98	29.00/2.55	27.00/3.21	0.00/6.95	0.00/5.39
Karelian	44.00/1.14	66.00/0.62	48.00/0.90	70.00/0.60	24.00/2.14	24.00/2.14	56.00/0.96	26.00/3.64	80.00/0.30	**88.00/0.24**‡	42.00/1.00	18.00/1.66
Kashubian	**58.00/0.72**	**60.00/0.96**	52.00/1.04	44.00/1.16	**60.00/0.70**	**60.00/0.70**	**56.00/0.88**	52.00/1.00	46.00/0.86	52.00/0.98	8.00/1.82	6.00/2.00
Kazakh	64.00/0.46	**78.00/0.24**	60.00/0.58	62.00/0.50	26.00/1.72	26.00/1.72	48.00/1.28	22.00/2.66	68.00/0.34	64.00/0.44	42.00/0.74	20.00/1.04
Khakas	62.00/0.42	—	60.00/0.52	70.00/0.64	26.00/2.42	26.00/2.42	68.00/0.58	50.00/0.88	62.00/0.54	36.00/1.70	42.00/0.64	16.00/2.40
Khaling	2.30/4.71	0.10/5.36	13.60/2.67	22.10/2.38	3.20/4.37	3.20/4.37	0.80/4.39	0.90/5.03	2.20/3.51	8.80/3.03	0.00/7.90	0.00/5.86
Kurmanji	82.90/0.46	86.00/1.11	80.30/0.40	14.50/2.95	82.70/0.45	82.70/0.45	71.40/0.66	49.30/1.01	25.40/1.76	14.50/2.95	63.10/0.81	0.20/5.57
Ladin	53.00/1.03	62.00/1.17	53.00/0.75	51.00/1.01	58.00/0.96	58.00/0.96	30.00/1.32	41.00/1.15	33.00/1.41	28.00/1.88	24.00/1.51	6.00/3.85
Latin	14.40/3.09	12.10/2.65	9.30/2.77	1.10/4.82	16.10/2.84	16.10/2.84	8.50/2.89	8.10/2.91	1.00/4.35	1.10/4.82	0.00/10.23	0.00/7.37
Latvian	48.30/1.01	51.50/1.63	40.50/1.16	26.80/1.86	52.80/0.87	52.80/0.87	35.60/1.25	31.00/1.41	9.00/2.68	5.40/3.68	5.40/2.14	0.00/6.39
Lithuanian	19.10/2.10	14.00/2.90	10.80/2.29	9.20/2.56	23.00/1.89	23.00/1.89	6.60/2.52	8.40/2.31	2.80/3.29	1.60/4.09	0.00/9.02	0.10/5.98
Livonian	**29.00/2.10**	24.00/3.00	24.00/2.01	16.00/2.35	**28.00/2.14**	**28.00/2.14**	14.00/2.67	11.00/2.72	6.00/3.40	8.00/4.01	10.00/3.10	0.00/5.68
Lower-sorbian	35.70/1.24	35.90/1.25	31.60/1.35	28.60/1.66	32.60/1.29	32.60/1.29	13.90/1.92	8.00/2.10	9.90/2.38	5.00/3.33	4.90/2.17	1.00/4.33
Macedonian	45.50/1.03	49.10/0.79	44.40/0.86	44.70/0.88	49.80/0.89	49.80/0.89	16.70/1.85	25.10/1.42	16.70/1.69	15.20/2.52	10.30/1.75	0.10/5.45
Maltese	18.00/1.97	7.00/8.76	14.00/2.03	17.00/2.22	10.00/2.37	10.00/2.37	16.00/1.90	14.00/1.85	8.00/2.78	7.00/3.81	3.00/3.73	0.00/3.60
Mapudungun	**68.00/0.80**	**76.00/0.42**	60.00/0.66	**84.00/0.38**	64.00/0.68	64.00/0.68	64.00/0.54	42.00/0.90	**74.00/0.36**	**86.00/0.24**	44.00/1.00	0.00/4.56
Middle-french	77.30/0.55	76.70/0.59	76.30/0.50	66.50/0.89	76.90/0.49	76.90/0.49	71.90/0.66	61.90/0.82	32.80/1.47	30.00/1.98	5.20/2.14	1.40/4.62
Middle-high-german	56.00/0.62	60.00/0.60	66.00/0.52	58.00/0.80	38.00/0.84	38.00/0.84	66.00/0.58	44.00/0.86	56.00/0.70	0.00/6.20	20.00/1.66	24.00/1.52
Middle-low-german	16.00/1.86	14.00/2.70	36.00/1.52	24.00/2.26	18.00/1.76	18.00/1.76	26.00/1.52	20.00/1.96	14.00/2.76	0.00/7.16	6.00/2.72	10.00/3.16
Murrinhpatha	14.00/2.40	0.00/8.04	20.00/2.00	**38.00/1.68**	6.00/2.72	2.00/4.22	20.00/2.00	10.00/2.12	**28.00/1.72**	**36.00/1.80**	2.00/2.94	0.00/3.98
Navajo	17.10/3.72	8.50/5.96	8.70/3.69	3.40/4.51	17.80/3.39	0.00/7.76	9.40/3.65	6.20/3.63	0.90/5.37	1.80/5.12	0.00/8.96	0.00/7.20
Neapolitan	79.00/0.94	**84.00/0.29**	36.00/0.94	59.00/0.96	79.00/0.59	79.00/0.59	61.00/0.76	45.00/0.98	45.00/1.02	59.00/0.79	24.00/1.47	6.00/3.04
Norman	30.00/2.48	48.00/0.96	40.00/1.42	**58.00/1.16**	30.00/2.22	30.00/2.22	34.00/1.50	8.00/2.32	52.00/1.10	**66.00/0.74**	22.00/2.16	20.00/2.60
North-frisian	29.00/3.24	15.00/32.10	34.00/2.36	29.00/2.39	29.00/3.34	29.00/3.34	17.00/3.86	13.00/4.05	18.00/3.01	27.00/2.82	12.00/5.22	1.00/6.29
Northern-sami	11.70/2.80	8.40/2.90	6.20/3.10	18.30/2.27	16.40/2.35	16.40/2.35	5.30/3.20	2.00/3.38	1.50/3.99	5.40/3.65	0.00/9.29	0.20/5.89
Norwegian-bokmaal	72.30/0.40	71.40/0.46	71.60/0.45	70.40/0.46	68.70/0.49	68.70/0.49	7.60/1.78	9.30/1.68	40.80/0.96	28.60/1.95	45.90/0.79	0.20/5.26
Norwegian-nynorsk	37.40/1.17	50.20/0.95	42.00/1.02	46.80/0.96	50.20/0.89	50.20/0.89	29.60/1.38	29.00/1.35	22.00/1.63	14.60/2.68	10.70/1.46	0.00/6.06
Occitan	68.00/0.99	68.00/1.31	60.00/0.77	62.00/0.85	**72.00/0.82**	**72.00/0.82**	56.00/0.92	49.00/1.19	31.00/1.44	21.00/2.11	1.00/2.76	5.00/3.59
Old-armenian	31.00/1.75	29.50/2.01	23.30/1.73	17.90/1.96	30.70/1.74	30.70/1.74	16.50/2.01	16.00/2.07	1.90/3.40	0.90/5.64	0.00/7.40	0.10/5.09
Old-church-slavonic	35.00/1.22	32.00/1.26	31.00/1.28	25.00/1.55	40.00/1.14	40.00/1.14	35.00/1.18	18.00/1.61	21.00/1.72	11.00/2.61	9.00/2.17	10.00/2.91
Old-english	12.10/2.15	12.60/2.17	13.70/1.94	15.30/2.10	17.60/1.72	17.60/1.72	12.60/2.04	10.70/2.15	8.60/2.75	6.70/4.17	3.60/2.74	0.60/4.63
Old-french	28.00/1.97	27.20/1.58	23.50/1.79	26.90/2.03	32.50/1.65	32.50/1.65	20.30/1.94	15.70/2.05	7.00/2.86	7.30/2.97	1.10/3.12	0.10/5.12
Old-irish	**8.00/4.30**‡	**6.00/6.08**‡	**6.00/3.86**‡	—	**8.00/4.06**‡	**8.00/4.06**‡	**4.00/3.74**	**2.00/4.06**	**2.00/4.04**	**0.00/6.94**	**2.00/4.68**	**0.00/5.68**
Old-saxon	17.10/2.16	20.90/1.90	12.90/1.97	15.70/1.99	22.80/1.84	22.80/1.84	10.90/2.29	9.50/2.23	5.60/2.79	5.90/3.27	4.60/2.51	0.60/4.41
Pashto	34.00/2.09	27.00/2.80	34.00/1.47	19.00/2.27	35.00/1.91	35.00/1.91	27.00/1.87	17.00/2.29	11.00/2.64	8.00/3.56	15.00/2.34	0.00/4.52
Persian	29.50/3.15	33.10/3.07	39.60/1.57	31.60/2.35	26.50/3.17	26.50/3.17	17.20/3.29	15.40/4.55	6.30/3.91	13.10/3.99	0.00/11.63	1.00/6.19
Polish	40.20/1.70	32.90/2.46	23.10/1.92	16.90/3.04	40.40/1.60	40.40/1.60	19.50/2.07	11.30/2.21	4.70/3.29	2.40/6.75	0.00/9.64	0.00/7.83
Portuguese	62.60/0.96	66.90/0.66	57.30/0.72	35.00/1.36	62.60/0.83	62.60/0.83	44.90/1.08	41.10/1.08	19.90/1.72	14.90/2.22	5.70/2.59	0.20/5.25
Quechua	15.60/6.47	50.70/1.42†	14.20/3.09	58.50/1.27†	15.90/6.46	15.90/6.46	10.50/4.34	6.10/4.69	15.00/3.19	22.20/3.49	0.00/13.64	0.00/10.05
Romanian	**44.30/1.60**	29.50/3.01	27.80/1.97	19.50/2.77	**44.70/1.52**	**44.70/1.52**	26.10/2.08	18.90/2.53	4.60/3.83	3.80/4.67	6.30/3.27	0.00/6.49
Russian	45.20/1.27	37.00/2.46	25.10/1.65	16.50/2.23	43.40/1.13	43.40/1.13	17.50/1.77	8.90/1.95	7.50/3.02	0.00/10.26	—	0.00/7.56
Sanskrit	41.80/1.52	43.80/1.27	23.60/1.87	32.80/1.66	33.70/1.50	33.70/1.50	12.60/2.80	17.30/2.37	6.70/3.04	6.00/3.92	6.60/2.90	0.00/6.36
Scottish-gaelic	58.00/0.70	42.00/1.68	**62.00/0.70**	54.00/1.34	46.00/0.96	46.00/0.96	54.00/0.92	46.00/1.08	48.00/1.40	46.00/1.38	32.00/1.70	40.00/2.14
Serbo-croatian	20.70/2.70	24.70/2.67	28.50/1.85	19.10/3.56	22.10/2.66	22.10/2.66	11.40/2.93	10.90/2.99	4.10/4.05	0.00/7.99	0.00/10.54	0.00/7.13
Slovak	44.80/1.10	42.20/1.15	39.20/1.09	—	37.70/1.15	37.70/1.15	25.70/1.48	16.60/1.62	9.60/2.23	0.00/6.89	11.60/1.71	0.10/4.69
Slovene	6.10/1.79	44.80/1.28	32.10/1.12	34.20/1.16	32.30/1.17	32.30/1.17	12.50/1.80	11.30/1.85	14.00/2.04	13.20/2.75	7.90/1.77	2.30/4.62
Sorani	19.50/3.58	7.00/4.32	16.00/2.07	13.20/2.52	19.90/3.35	19.90/3.35	1.90/4.46	1.30/4.63	1.30/4.08	2.20/4.17	0.80/4.55	0.10/5.54
Spanish	59.70/1.28	55.80/1.50	60.40/0.85	55.30/1.11	61.80/1.08	61.80/1.08	45.30/1.31	41.70/1.28	13.00/2.67	14.80/2.95	5.80/2.48	0.10/6.00
Swahili	35.00/2.48	0.00/4.73	41.00/1.09	20.00/2.08	32.00/2.51	0.00/6.10	9.00/2.74	2.00/3.27	4.00/2.79	32.00/1.82	0.00/4.48	2.00/4.55
Swedish	49.40/0.84	56.90/0.69	58.90/0.70	52.90/0.83	51.10/0.89	51.10/0.89	54.90/0.83	50.40/0.86	32.80/1.19	16.90/2.61	13.90/1.83	0.00/6.67
Tatar	72.00/0.35	79.00/0.28	66.00/0.44	74.00/0.39	50.00/0.85	50.00/0.85	37.00/1.34	52.00/0.95	44.00/0.95	20.00/2.22	53.00/0.73	0.00/5.42
Telugu	70.00/1.18	—	**86.00/0.24**	**96.00/0.12**‡	70.00/1.14	70.00/1.14	82.00/0.82	78.00/0.62	**94.00/0.18**‡	**96.00/0.06**‡	46.00/1.56	60.00/0.88
Tibetan	**46.00/0.84**	40.00/1.10	**48.00/0.82**	36.00/1.10	34.00/1.02	34.00/1.02	**46.00/0.98**	**44.00/0.94**	36.00/1.12	**46.00/0.92**	38.00/1.24	26.00/1.38
Turkish	17.50/4.42	27.50/2.53	13.90/3.14	22.50/3.00	13.30/4.56	13.30/4.56	9.70/3.79	4.40/4.49	10.70/3.66	2.70/5.85	3.80/3.81	0.00/8.73
Turkmen	**86.00/0.20**‡	78.00/0.28	64.00/0.54	60.00/1.00	34.00/1.98	34.00/1.98	62.00/0.86	44.00/1.44	64.00/0.52	64.00/0.78	64.00/0.42	28.00/1.60
Ukrainian	43.30/0.99	36.50/1.41	30.00/1.27	30.40/1.23	38.70/0.99	38.70/0.99	26.00/1.36	22.00/1.40	9.00/2.28	9.30/3.62	13.40/1.54	0.00/5.79
Urdu	32.00/4.13	61.90/0.95†	62.50/0.80†	47.70/1.66†	32.70/4.08	32.70/4.08	49.10/1.45†	44.40/1.40	32.60/1.87	37.80/2.21	0.00/10.84	4.70/3.64
Uzbek	54.00/1.75	—	69.00/0.66	83.00/0.33	52.00/1.77	52.00/1.77	67.00/0.78	19.00/3.09	82.00/0.29	**90.00/0.23**†	41.00/0.88	26.00/1.74
Venetian	70.90/0.58	71.50/0.38	67.50/0.45	59.90/0.69	71.80/0.55	71.80/0.55	66.00/0.51	59.00/0.77	31.10/1.32	26.30/1.77	23.20/1.43	4.10/3.43
Votic	18.00/2.03	13.00/1.89	14.00/2.04	**34.00/1.51**	17.00/1.88	17.00/1.88	11.00/2.43	12.00/2.32	20.00/1.91	22.00/1.86	6.00/2.66	3.00/3.52
Welsh	27.00/1.78	**51.00/1.22**	32.00/1.83	28.00/1.79	30.00/1.45	30.00/1.45	17.00/2.14	20.00/2.04	11.00/2.66	14.00/2.75	0.00/8.39	0.00/4.76
West-frisian	47.00/1.41	43.00/1.39	33.00/1.32	31.00/1.62	**50.00/1.23**	**50.00/1.23**	29.00/1.58	39.00/1.44	26.00/1.67	27.00/1.86	22.00/1.83	18.00/2.40
Yiddish	**80.00/0.36**	72.00/0.44	**79.00/0.29**	55.00/0.87	78.00/0.38	78.00/0.38	55.00/0.84	67.00/0.63	33.00/1.65	26.00/3.12	41.00/1.03	0.00/5.65
Zulu	17.90/2.49	1.30/7.43	15.50/2.00	—	15.70/2.35	0.00/7.12	2.40/3.59	1.00/4.17	1.10/4.96	0.00/8.77	0.20/4.79	0.00/6.39

Table 18: Task 1 Low Condition Part 2.

	bme-01	bme-03	kucst-01	bme-02	tuebingen-oslo-03	tuebingen-oslo-01
Adyghe	0.00/69.64	0.00/69.64	0.70/5.96	0.00/8.29	0.00/5.89	0.00/9.97
Albanian	0.00/8.93	0.00/8.93	0.00/9.40	0.00/9.88	0.00/9.93	0.00/10.98
Arabic	0.00/8.96	0.00/8.96	0.00/10.78	0.00/8.72	0.10/6.19	0.00/10.67
Armenian	0.00/8.20	0.00/8.20	0.10/7.32	0.00/10.20	0.00/7.07	0.00/9.34
Asturian	2.40/3.32	2.40/3.32	0.60/4.89	0.00/7.15	0.10/5.03	0.00/7.83
Azeri	0.00/5.65	0.00/6.11	0.00/5.07	0.00/6.75	0.00/5.72	0.00/8.63
Bashkir	0.00/7.63	0.00/7.63	0.50/5.17	0.00/7.81	0.00/5.58	0.00/7.52
Basque	0.10/6.66	0.10/6.66	0.50/5.01	0.10/6.03	0.00/6.05	0.00/8.44
Belarusian	0.10/5.66	0.10/5.66	0.20/5.96	0.10/7.43	0.00/6.88	0.00/7.71
Bengali	0.00/5.10	0.00/5.14	2.00/4.22	0.00/5.65	0.00/4.58	0.00/7.63
Breton	13.00/2.27	13.00/2.27	1.00/2.98	5.00/3.16	9.00/2.68	0.00/5.89
Bulgarian	0.00/8.20	0.00/8.20	0.00/6.47	0.00/8.23	0.00/7.86	0.00/8.24
Catalan	0.00/7.66	0.00/7.66	0.10/6.10	0.00/7.56	0.00/6.16	0.00/7.98
Classical-syriac	24.00/1.07	24.00/1.07	4.00/2.73	10.00/3.33	11.00/2.18	0.00/5.83
Cornish	12.00/3.16	6.00/3.12	14.00/3.04	6.00/3.42	0.00/2.82	0.00/6.96
Crimean-tatar	0.00/5.41	0.00/5.41	0.00/5.09	0.00/7.06	0.00/5.30	0.00/6.91
Czech	0.00/7.87	0.00/7.87	0.10/7.30	0.00/9.27	0.00/7.71	0.00/8.87
Danish	0.00/7.12	0.00/7.12	0.80/5.97	0.00/7.80	0.00/6.56	0.00/7.12
Dutch	0.00/7.24	0.00/7.24	—	0.00/7.17	0.00/6.60	0.00/7.28
English	0.00/7.63	0.00/7.63	—	0.00/7.56	0.00/6.03	0.00/7.64
Estonian	0.00/9.58	0.00/9.58	0.10/7.39	0.00/9.13	0.00/7.86	0.00/8.99
Faroese	0.00/6.87	0.00/6.87	0.30/5.50	0.00/6.95	0.00/6.18	0.00/7.18
Finnish	0.00/13.42	0.00/13.42	0.00/13.84	0.00/18.49	0.00/10.61	0.00/12.50
French	0.00/8.91	0.00/8.91	—	0.00/8.24	0.00/7.19	0.00/8.50
Friulian	12.00/2.60	16.00/1.87	3.00/3.59	11.00/4.41	1.00/4.19	0.00/6.64
Galician	1.10/3.62	1.10/3.62	0.20/5.16	0.00/7.08	0.00/5.92	0.00/7.51
Georgian	0.00/7.52	0.00/7.52	0.00/5.97	0.00/7.62	0.00/5.76	0.00/8.95
German	0.00/8.25	0.00/8.25	—	0.00/8.30	0.00/7.13	0.00/7.83
Greek	0.00/10.67	0.00/10.67	0.10/8.17	0.00/9.58	0.00/9.33	0.00/10.33
Greenlandic	14.00/1.80	14.00/1.80	6.00/2.52	24.00/1.54	0.00/3.40	0.00/8.06
Haida	3.00/8.06	1.00/8.57	0.00/7.63	3.00/7.95	0.00/8.49	0.00/13.62
Hebrew	0.40/3.50	0.40/3.50	0.40/3.56	0.00/4.76	0.00/4.07	0.00/5.57
Hindi	0.00/9.66	0.00/9.66	2.20/6.46	0.00/9.28	0.00/6.07	0.00/11.32
Hungarian	0.00/11.30	0.00/11.30	0.00/8.40	0.00/16.28	0.00/8.83	0.00/9.92
Icelandic	0.00/6.51	0.00/6.51	0.10/5.74	0.00/7.16	0.00/6.33	0.00/7.28
Ingrian	4.00/2.56	10.00/2.24	0.00/2.76	6.00/2.52	0.00/4.04	0.00/5.96
Irish	0.00/10.39	0.00/10.39	0.00/9.54	0.00/10.24	0.00/9.31	0.00/10.81
Italian	0.00/18.32	0.00/18.32	0.00/6.99	0.00/10.11	0.00/8.17	0.00/9.76
Kabardian	9.00/2.83	9.00/2.83	3.00/3.94	6.00/4.68	1.00/4.40	0.00/8.04
Kannada	6.00/5.82	6.00/5.82	—	0.00/5.95	0.00/5.55	0.00/7.34
Karelian	4.00/2.44	4.00/2.44	4.00/2.82	6.00/2.24	2.00/2.66	0.00/7.90
Kashubian	14.00/2.34	14.00/2.34	8.00/2.52	16.00/2.32	2.00/3.34	0.00/7.22
Kazakh	28.00/1.20	28.00/1.20	2.00/2.14	0.00/7.74	26.00/1.02	0.00/7.68
Khakas	14.00/2.16	14.00/2.16	0.00/3.04	10.00/2.60	2.00/3.54	0.00/6.88
Khaling	0.10/5.48	0.00/5.56	0.80/4.86	0.10/5.76	0.00/5.62	0.00/7.18
Kurmanji	0.00/7.80	0.00/7.80	0.00/6.41	0.00/14.05	0.00/6.30	0.00/7.04
Ladin	1.00/2.89	3.00/3.42	5.00/3.72	0.00/6.33	0.00/4.61	0.00/6.90
Latin	0.00/9.16	0.00/9.16	0.00/7.40	0.00/9.10	0.00/7.79	0.00/9.07
Latvian	0.00/7.99	0.00/7.99	0.30/6.80	0.00/8.04	0.00/7.79	0.00/8.61
Lithuanian	0.00/8.84	0.00/8.84	0.20/6.50	0.00/7.70	0.00/7.20	0.00/8.19
Livonian	0.00/6.91	0.00/6.91	0.00/5.42	0.00/7.16	0.00/6.16	0.00/7.68
Lower-sorbian	0.20/4.80	0.20/4.80	1.40/4.68	0.00/5.99	0.00/5.46	0.00/6.37
Macedonian	0.00/7.62	0.00/7.62	0.20/5.84	0.00/7.58	0.00/6.02	0.00/7.78
Maltese	4.00/3.24	4.00/3.24	2.00/3.70	0.00/5.17	0.00/4.20	0.00/6.13
Mapudungun	40.00/1.36	40.00/1.36	14.00/2.10	34.00/1.74	0.00/3.10	0.00/6.52
Middle-french	1.20/4.68	1.20/4.68	0.40/5.26	0.20/7.37	0.00/5.87	0.00/8.03
Middle-high-german	16.00/2.12	16.00/2.12	24.00/1.42	10.00/2.68	8.00/2.06	0.00/5.38
Middle-low-german	10.00/3.28	6.00/4.00	—	12.00/3.86	8.00/3.08	0.00/5.68
Murrinhpatha	16.00/2.48	16.00/2.48	20.00/2.42	12.00/2.88	4.00/2.80	0.00/4.76
Navajo	0.00/6.31	0.00/6.31	0.50/6.16	0.00/7.33	0.00/6.83	0.00/8.49
Neapolitan	17.00/3.25	13.00/2.70	2.00/3.52	16.00/2.53	0.00/4.79	0.00/8.88
Norman	20.00/2.38	20.00/2.38	8.00/3.44	12.00/3.18	4.00/2.54	0.00/7.22
North-frisian	4.00/4.42	4.00/4.30	—	4.00/4.60	1.00/5.46	0.00/6.96
Northern-sami	0.30/5.45	0.30/5.45	0.20/6.38	0.00/8.17	0.00/7.74	0.00/8.21
Norwegian-bokmaal	0.00/7.08	0.00/7.08	0.80/5.04	0.00/7.15	0.00/6.81	0.00/6.77
Norwegian-nynorsk	0.00/7.22	0.00/7.22	0.50/5.62	0.00/7.64	0.00/6.30	0.00/7.02
Occitan	7.00/2.54	7.00/2.54	2.00/4.38	1.00/6.01	0.00/4.68	0.00/7.36
Old-armenian	0.00/5.85	0.00/5.85	0.40/5.33	0.00/6.38	0.00/6.02	0.00/6.44
Old-church-slavonic	11.00/2.43	11.00/2.43	9.00/2.93	3.00/5.19	1.00/4.00	0.00/6.23
Old-english	0.00/6.59	0.00/6.59	—	0.00/6.55	0.00/5.55	0.00/6.40
Old-french	0.00/7.57	0.00/7.57	0.30/5.66	0.00/7.89	0.00/6.19	0.00/7.63
Old-irish	**0.00/4.68**	**0.00/4.68**	**0.00/4.72**	**0.00/5.24**	**0.00/5.16**	**0.00/6.80**
Old-saxon	0.00/6.03	0.00/6.03	0.90/4.70	0.00/6.34	0.10/5.34	0.00/6.92
Pashto	0.00/5.17	0.00/5.17	3.00/3.77	0.00/5.31	0.00/4.49	0.00/6.16
Persian	0.00/11.69	0.00/11.69	0.00/10.08	0.00/9.85	0.00/6.76	0.00/11.34
Polish	0.00/8.63	0.00/8.63	—	0.00/8.67	0.00/7.77	0.00/8.57
Portuguese	0.00/8.19	0.00/8.19	0.20/5.58	0.00/8.13	0.00/6.12	0.00/8.31
Quechua	0.00/6.95	0.00/8.16	0.10/7.54	0.00/10.77	0.00/7.99	0.00/12.01
Romanian	0.00/11.83	0.00/11.83	0.00/6.83	0.00/8.81	0.00/8.03	0.00/8.12
Russian	0.00/9.24	0.00/9.24	—	0.00/9.10	0.00/8.33	0.00/9.46
Sanskrit	0.20/5.93	0.20/5.93	0.80/5.64	0.10/6.84	0.00/6.43	0.00/8.11
Scottish-gaelic	18.00/3.38	18.00/3.38	28.00/2.34	2.00/6.28	10.00/3.78	0.00/8.34
Serbo-croatian	0.00/9.44	0.00/9.44	0.00/8.19	0.00/9.49	0.00/8.64	0.00/9.18
Slovak	0.00/6.29	0.00/6.29	0.80/4.68	0.00/6.23	0.00/5.12	0.00/6.33
Slovene	0.00/7.00	0.00/7.00	0.00/8.28	0.00/7.23	1.50/4.95	0.00/7.51
Sorani	0.00/7.01	0.00/7.01	0.20/5.72	0.00/6.87	0.00/5.46	0.00/7.88
Spanish	0.00/8.48	0.00/8.48	0.20/6.65	0.00/8.51	0.00/6.90	0.00/8.84
Swahili	3.00/3.88	3.00/3.88	4.00/3.68	2.00/5.54	0.00/5.07	0.00/7.38
Swedish	0.00/8.47	0.00/8.47	0.20/6.89	0.00/8.86	0.00/7.50	0.00/8.32
Tatar	0.00/7.30	0.00/7.30	1.00/5.37	0.00/7.42	0.00/6.09	0.00/7.29
Telugu	28.00/1.58	28.00/1.58	24.00/2.40	26.00/1.74	6.00/2.82	0.00/10.74
Tibetan	0.00/3.66	0.00/3.66	32.00/1.18	0.00/3.68	22.00/1.64	0.00/4.06
Turkish	0.00/8.69	0.00/8.69	0.10/8.64	0.00/16.38	0.00/9.48	0.00/10.71
Turkmen	2.00/2.38	2.00/2.38	2.00/2.68	2.00/4.38	0.00/4.66	0.00/7.00
Ukrainian	0.00/6.24	0.00/6.24	1.40/5.14	0.00/6.74	0.00/6.29	0.00/7.05
Urdu	8.40/3.76	8.40/3.76	3.90/4.82	1.60/9.69	0.20/5.54	0.00/10.49
Uzbek	7.00/2.75	7.00/2.75	0.00/3.96	5.00/2.95	20.00/1.59	0.00/9.48
Venetian	0.00/5.58	0.00/5.58	2.10/4.07	0.00/5.99	0.00/4.73	0.00/6.78
Votic	2.00/2.96	2.00/3.10	1.00/3.21	1.00/3.51	0.00/4.50	0.00/6.16
Welsh	0.00/5.76	0.00/5.76	1.00/4.91	0.00/7.30	0.00/5.65	0.00/7.92
West-frisian	8.00/3.09	1.00/3.47	6.00/2.71	3.00/3.74	3.00/2.95	0.00/4.99
Yiddish	0.00/11.50	0.00/11.50	0.00/4.50	0.00/6.76	0.00/5.59	0.00/8.03
Zulu	0.00/7.44	0.00/7.44	0.30/5.57	0.00/7.68	0.00/6.91	0.00/7.88

Table 19: Task 1 Low Condition Part 3.