START OF QUIZ
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Question 1

Topic: Lecture 6
Source: Lecture 6

Would F1 score be an appropriate measure for gauging the quality of a morphological analyzer? Explain why or why not. (1)

Question 2

Topic: Lecture 7
Source: Lecture 7

Describe elision in terms of edit actions. (1)

Question 3

Topic: Lecture 8
Source: Lecture 8

If we observe a DL model that is not properly modeling morphology (but handles syntax and semantics relatively well), what change might you propose to the architecture of the model (assume we don't have any annotated morphology data). (1)

Question 4

Topic: Lecture 5
Source: Lecture 5

Why do we attach an embedding layer before passing information to the hidden layer(s)? (1)

Question 5

Topic: Lecture 7
Source: Lecture 7

Describe epenthesis in terms of edit actions. (1)

Question 6

Topic: Lecture 5
Source: Lecture 5

In DSCI 563, we discussed EM for POS tagging. Let's make it neural. Assume we have a small set of gold annotated sentences (100). How could we use contextualized embeddings to bootstrap more annotated data (assume that fine-tuning doesn't work)? (2)

Question 7

Topic: Lecture 8
Source: Lecture 8

Imagine we have a good neural morphological analyzer, and we want to inject the knowledge into a larger NLP DL model (like an LLM, etc.). How might we do so in an efficient way? (2)

Question 8

Topic: Lecture 6
Source: Lecture 6

We know that domain shift can have a significant impact on the quality of our models - despite POS tagging being an "easy" task, POS taggers fail spectacularly when we try to use them on different domains. Do you think the same would be true of (contextual) morphological analysers? What similarities and differences between POS and MSD led you to this conclusion? (2)

Question 9

Topic: Long
Source: Lecture 5

In class, we talked about how POS and morphological information is often latently encoded in word embeddings, but not in character embeddings. Let's think about subword embeddings, since most DL models are going to use subword representations. If a word is split, where do you think this information is encoded, and does it matter? Explain your reasoning. (3)

END OF QUIZ