START OF QUIZ
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Question 1

Topic: Lecture 2
Source: Lecture 2

What properties of English syntax make regular expressions suitable for chunking? Do you think that this functionality would extend to many other languages? Briefly explain. (1)

Question 2

Topic: Lecture 3
Source: Lecture 3

What does it mean to delexicalize a sentence? Why might that help or harm an automatic parser? (1)

Question 3

Topic: Lecture 4
Source: Lecture 4

Briefly describe how underspecification works in a feature grammar. (1)

Question 4

Topic: Lecture 1
Source: Lecture 1

Describe why POS tagsets may need to differ depending on the language that we are parsing. (1)

Question 5

Topic: Lecture 1
Source: Lecture 1

Write the parenthetic parse of the following sentence: "I will not eat green eggs and ham." (1)

Question 6

Topic: Lecture 3
Source: Lecture 3

Imagine, if you will, a "mildly-context-sensitive" grammar, that only allows for one non-terminal to appear as a contextual marker (let's call it "CON"). Anything not involving CON has to satisfy CFG rules. Do you think that this would be restrictive enough to satisfy the small number of cases that don't satisfy context-freedom, without just being a CSG in disguise? (2)

Question 7

Topic: Lecture 4
Source: Lecture 4

Given two parse trees, calculate the PARSEVAL score. Also briefly describe whether any errors are "syntacto-semantic" errors (ie, an error that requires real-world knowledge to arrive at the correct parse). 1: (S (NP (DT The) (JJ quick) (JJ brown) (NN fox)) (VP (VBZ jumps) (PP (IN over) (NP (DT the) (JJ lazy) (NN dog))))) (2): (S (NP (NP (DT The) (NP (JJ quick) (NP (JJ brown) (NN fox))))) (VP (VBZ jumps) (PP (IN over) (NP (DT the) (JJ lazy) (NN dog)))))

Question 8

Topic: Lecture 2
Source: Lecture 2

Imagine you're working on analysing customer feedback, and your boss wants you to identify the most common complaints. How might you use your parsing knowledge to automate and distill the most common complaints? You can assume that complaints have already been labeled with the product they are complaining about. You can also assume that just sorting the frequency of tokens is going to be insufficient. (2)

Question 9

Topic: Long
Source: Lecture 4

Imagine you're building a tool to help second language learners of language X. You have a grammar of their first language (L1), and a grammar of the language they are trying to learn (X). How might you build a tool that learns how to translate a production from L1 into X? Describe any additional data or tools you might need, and the process you would use to learn a "production-translation grammar". Also explain how you could use this to create illustrative examples of how the syntax of language X works.

END OF QUIZ