START OF QUIZ
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Question 1

Topic: Lecture 6
Source: Lecture 6

Beautiful Soup parses the children of a tag as a list. Why do you think they didn't use a set, instead, given the faster access times? Give 2 reasons, and briefly explain. (1)

Question 2

Topic: Lecture 7
Source: Lecture 7

What impact does lemmatization or stemming have with respect to the Zipfian curve? How might that affect our algorithms? (1)

Question 3

Topic: Lecture 5
Source: Lecture 5

Imagine you have a block of text with paragraphs separated by blank lines. How would you use regex to find the start of each paragraph? What assumptions would you make about the formatting of the text? (1)

Question 4

Topic: Lecture 7
Source: Lecture 7

Can you think of any classes of words in English where the stem and the lemma will always be identical? Why is that of little interest to us? (1)

Question 5

Topic: Lecture 8
Source: Lecture 8

Give 2 reasons to use a zip file. (1)

Question 6

Topic: Lecture 5
Source: Lecture 5

Imagine you are processing a text document where dates are written in multiple formats, such as ”12-05-2024”, ”05/12/2024”, or ”12 December 2024”. How would you write a regex to capture these date formats (just the logic)? What assumptions would you make? (2)

Question 7

Topic: Lecture 6
Source: Lecture 6

Suppose you've trained a Named Entity Recognition (NER) model using XML-annotated text data, but it consistently fails to recognize locations. What steps would you take to determine if the problem lies with the model, the training data, or both? What resources would you need to investigate further? (2)

Question 8

Topic: Lecture 8
Source: Lecture 8

Imagine that you're working with a linguist who is not very good with technology. They store all of their data in .docx files, scattered across their desktop. What arguments would you make for them to convert to .tsv or .json, and how would you alleviate their worries that they wouldn't be able to access or modify their information (no, you can't teach them Python)? (2)

Question 9

Topic: Long
Source: Lecture 6

You've been hired by a company that is working with their own version of XML that they call "NQAXML" (Not-Quite-As-eXtensible Markup Language). It provides stronger restrictions on tag names (they must be all uppercase, and no longer than 10 characters long), and it doesn't allow nested spans with identically-named tags. Like HTML, it also has a set of tags that must appear in every document. Describe your process for creating a data validator that takes an XML file, and ensures that it satisties the rules of NQAXML. (3)

END OF QUIZ