

START OF QUIZ

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Question 1

Topic: Lecture 4

Source: Lecture 4

Given a list of tuples where the first element is a string and the second is an integer, write a short piece of code to sort the list in descending order based on the second element. Briefly explain your approach. (1)

Question 2

Topic: Lecture 3

Source: Lecture 3

What is the Big O time complexity of finding the elements in a set that intersect with an iterable (ie, string, list, etc)? Briefly explain. (1)

Question 3

Topic: Lecture 4

Source: Lecture 4

In class, we removed stopwords by using a lexicon. Can you think of another way that we could remove all closed class words? (1)

Question 4

Topic: Lecture 1

Source: Lecture 1

What method would you use to check if a string contains only numeric digits (including decimals) without using any additional libraries? (1)

Question 5

Topic: Lecture 1

Source: Lecture 1

What are two ways to check if a string is a palindrome, without reversing the string? (1)

Question 6

Topic: Lecture 2

Source: Lecture 2

If you were to analyze a corpus for stylistic differences, how might you determine: the formality of the language; whether it's written or spoken; its sentiment? Assume that we don't have existing ML tools or enough data to train one. (2)

Question 7

Topic: Lecture 2

Source: Lecture 2

Is it possible for a corpus of a low-resource language to follow Zipf's law? What factors might influence the degree to which the law applies in such languages? (2)

Question 8

Topic: Lecture 3

Source: Lecture 3

Lexicons are useful for initial text analysis but often lack the adaptability needed for advanced NLP tasks. Why is this the case? Provide at least 2 reasons with brief explanations.
(2)

Question 9

Topic: Long

Source: Lecture 4

Suppose you have a large corpus of mixed language text, and you are tasked with detecting which language each sentence is written in. What techniques could you apply to achieve this, assuming you cannot use a pre-trained language detection model? Please provide a detailed explanation of your reasoning. (3)

END OF QUIZ