

START OF QUIZ
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Question 1

Topic: Lecture 2

Source: Lecture 2

If a language has a highly synthetic morphology (many affixes), would you expect it to have a higher or lower Type-Token Ratio (TTR) than a language with less rich morphological structure? Briefly explain why. (1)

Question 2

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 3

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 4

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 5

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 6

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 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 1

Source: Lecture 1

You are given a sentence. Write a function to count how many words in the sentence start with a vowel, without using loops or list comprehensions. (2)

Question 9

Topic: Long

Source: Lecture 1

Write a function that validates if a string matches a phone number format, such as (123) 456-7890. What types of invalid inputs should the function check for? Are there edge cases we would be willing to accept? How would we handle those? Write 3 test cases - 2 that should pass, and one that should fail. (3)

END OF QUIZ