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

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 3

Topic: Lecture 1
Source: Lecture 1

Why is the .split() method useful when working with sentences or phrases? (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 3
Source: Lecture 3

When we nest deep structures in dictionaries, we lose their $O(1)$ benefits. Can you think of a better way to represent complex data sets? (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

Attributive adverbs are a type of adverb that provides "flavour" to speech verbs (example: "she said quickly"; "he spoke loudly"). They are often frowned upon in formal writing, because they can be replaced with other verbs: "blurted" or "shouted", in the example. Write a quick function that finds them in the Brown corpus, and reports how many sentences in 1000 have them. (2)

Question 8

Topic: Lecture 3
Source: Lecture 3

Imagine you have a large text corpus in English and Spanish and want to automatically align sentences for machine translation. What are some straightforward methods you could use to identify sentence pairs that are likely translations of each other? (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