# START OF QUIZ Student ID: 31181845, Yuan, Su

Topic: Lecture 1 Source: Lecture 1

How would you convert a string into a list of characters? (1)

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When would you choose to preserve the original case of text during data processing, rather than converting everything to lowercase? (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)

Topic: Lecture 4 Source: Lecture 4

Would you expect a higher or lower frequency of passive voice constructions in legal documents compared to casual conversation? Briefly explain your reasoning. (Remember that passive voice is a structure like "the tree was cut down", inverting the subject and object). (1)

Topic: Lecture 2 Source: Lecture 2

Why is it important to understand the intended audience and time period of a corpus when conducting linguistic analysis? (1)

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)

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)

Topic: Lecture 4 Source: Lecture 4

In French, negation is often indicated by "ne ... pas" (ie, "je ne parle pas" - "I am not speaking"; "tu ne conduis pas" - "You are not driving", etc.). However, in speech, one of the two is often dropped: "je ne parle." or "tu conduis pas.". Using this information, how would you determine whether a corpus was composed of written or spoken French? You don't need to write the code, but explain the logic that you would use to come to this conclusion. (2)

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