

START OF QUIZ

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Question 1

Topic: Lecture 3

Source: Lecture 3

What properties of dictionaries make them an efficient choice for nesting complex lexicons.

(1)

Question 2

Topic: Lecture 4

Source: Lecture 4

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 3

Topic: Lecture 4

Source: Lecture 4

Why does type-to-token ratio decrease as the size of the corpus increases? What does this suggest about long documents? (1)

Question 4

Topic: Lecture 1

Source: Lecture 1

In class, we talked about how `.isdigit()` is insufficient for determining whether we can convert a string to a float. Write a short function `isfloat` that determines whether a provided string is a valid floating point number. (2)

Question 5

Topic: Lecture 2

Source: Lecture 2

Do you think it's possible for a language not to follow a Zipfian curve? What consequences might that have on communication (if, let's say, if the curve were linear)? (2)

Question 6

Topic: Lecture 1

Source: Lecture 1

Why is `strip()` such a useful function? (1)

Question 7

Topic: Lecture 2

Source: Lecture 2

What are 2 benefits of providing a corpus reader with your corpus? (1)

Question 8

Topic: Lecture 3

Source: Lecture 3

Describe the concept of the "Minimum viable product", and how it relates to using lexicons.

(1)

Question 9

Topic: Coding

Source: Coding

Grimm's law is a linguistic phenomenon that describes how sounds in language (mostly related to the Germanic languages like English, Dutch, German, Norwegian, Icelandic, etc.) changed over time (specifically from some progenitor thousands of years old - Germanic languages observed the change, while Romance languages did not). For example, the /p/ sound in Latin evolved into the /f/ sound in English across many words - compare "piscus" with "fish"; "pater" with "father"; "pedus" with "foot" (there are a couple other changes in there, too - see if you can spot them!). If you had a time machine, and could bring a computational toolkit to help Jacob Grimm formulate his law, what would you need, in terms of lexicons, keeping in mind that the /p/ -> /f/ change is only one of a handful of sound changes, and that the changes occurred over dozens of languages? Explain (with pseudocode, if necessary), how you would start to identify trends in the data (assuming that your computer still works in the 19th century)? (3)

END OF QUIZ