

START OF QUIZ

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Question 1

Topic: Lecture 3

Source: Lecture 3

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

(1)

Question 2

Topic: Lecture 2

Source: Lecture 2

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

Question 3

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 4

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 5

Topic: Lecture 3

Source: Lecture 3

How does "get" differ from a default dictionary (2 ways)? (1)

Question 6

Topic: Lecture 1

Source: Lecture 1

Vowels are often used as a proxy for syllables in words (it's not a perfect correspondence, but it's not bad). Write a function that counts the vowels in a word, without using a loop, using only the tools we went over in Lecture 1 (list comprehension counts as a loop). (2)

Question 7

Topic: Lecture 4

Source: Lecture 4

We discussed two alternative methods for noise reduction: removing all words above a certain frequency, or only removing those from a curated lexicon. Name an advantage to both.
(1)

Question 8

Topic: Lecture 2

Source: Lecture 2

Why is it important to know when a corpus was constructed, and who constructed it? (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