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Topic: Lecture 6 Source: Lecture 6

Imagine that you're building a web scraper, and you find that most of the information presented on the front page is just a collection of links to other pages, so you can't just parse it with an XML parser. What extra functionality would you have to build into your scraper to actually get all the XML data? (2)

Topic: Lecture 8 Source: Lecture 8

Why do Python programmers like JSON files so much? (1)

Topic: Lecture 5 Source: Lecture 5

Write a short function that uses regexes to identify which case (title, camel, or sentence case) a sentence occurs in. (1)

Topic: Lecture 5 Source: Lecture 5

What is the purpose of escaping? (1)

${\bf Question}\ 5$

Topic: Lecture 8 Source: Lecture 8

In class, I mentioned that we always want to close a file correctly. Beyond freeing up system resources, it also "flushes the buffer", which ensures that any current read or write operations that are in the job queue, but haven't yet been processed, are completed. Knowing what you do about encodings, what is a possible ramification of not flushing the buffer? Explain at least 2. (2)

Topic: Lecture 6 Source: Lecture 6

In class, we mentioned a few different file types that are actually XML (such as .html, .doc, and .ipynb). Do you think that you could represent a Python library as an XML document? If so, what kind of tags might you need to cover some of the syntactic rules of Python? If not, why not? (2)

Topic: Lecture 7 Source: Lecture 7

What impact does lemmatization or stemming have with respect to the Zipfian curve? How might that affect our algorithms? (1)

Topic: Lecture 7 Source: Lecture 7

What implications does correct sentence segmentation have on downstream tasks? List at least one assumption we can make if we can assume that our sentences are correctly segmented. (1)

Topic: Long Source: Long

In class, we've taken a brief look at both prefixes and suffixes, but there are other ways of inflecting words. "circumfixes" wrap around a word, such as the German past participle marker "ge-t" ("ich spiele" - "I play"; "ich habe gespielt" - I have played). Likewise, "infixes" occur inside of a word - "cupful" + Plural -> "cupsful", or in Tagalog: "bili" -> "to buy"; "bumili" -> "X is buying". Finally, "reduplication" occurs when part or all of a token is repeated to indicate some feature, such as repetition or future intent in Tagalog: "aray" -> "day"; "arayaray" -> everyday; "basa" -> "to read"; "babasa" -> "will read (in the future)". Which of these are best suited for regexes, and which features of regexes are they exploiting? Are there any that are mostly unsuited to regexes? Why? (3)

END OF QUIZ