START OF QUIZ
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Question 1

Topic: Topic2
Source: Lecture 2

Why is the Forgy initialization sub-optimal?

Question 2

Topic: Topic4
Source: Lecture 4

Imagine that we are doing ASR instead of POS tagging. Briefly describe what the emissions and transitions would be.

Question 3

Topic: Topic2
Source: Lecture 2

Are both K-means and agglomerative clustering iterative? Explain, and for each that is, explain when the algorithm ends.

Question 4

Topic: Topic1
Source: Lecture 1

When is dynamic programming more efficient than brute force programming? (ie, what assumptions do we make about a problem when we use dynamic programming?)

Question 5

Topic: Topic4
Source: Lecture 4

Briefly describe why soft EM might provide more accurate tagging results than hard EM.

Question 6

Topic: Topic3
Source: Lecture 3

Describe the noisy channel model, and how it can be used to represent POS-Tagging.

Question 7

Topic: Topic3
Source: Lecture 3

If our vocabulary consists of just symbols A and B, and our corpus consists of the sequence: A A B B A B, and we build a bigram language model by applying add-one smoothing to the MLE from the corpus, what is the probability of P(B||A)? Please show your work.

Question 8

Topic: Topic1
Source: Lecture 1

What is the main difference between Hamming Distance and Edit Distance?

Question 9

Topic: Coding
Source: Lecture 3

In class, we built a collocation matrix for a bigram language model. Modify the function so that it can handle trigram language model and implements ”add-alpha” smoothing, instead of ”add-one” smoothing.

END OF QUIZ