START OF QUIZ
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Question 1

Topic: Lecture 2
Source: Lecture 2

Discuss the purpose of the linkage criterion in hierarchical clustering (1)

Question 2

Topic: Lecture 4
Source: Lecture 4

Why are the forward and Viterbi algorithms considered to be dynamic programming, and why do we care? (1)

Question 3

Topic: Lecture 3
Source: Lecture 3

Imagine that we are doing machine translation instead of POS-tagging. What would be the equivalent of emission probabilities and transition probabilities? Explain. (2)

Question 4

Topic: Lecture 3
Source: Lecture 3

Describe the noisy channel model, and how it can be used to represent [Machine Translation, ASR, POS-tagging]. (1)

Question 5

Topic: Lecture 1
Source: Lecture 1

Explain what modifications would need to be made to our dynamic edit distance algorithm to incorporate weighted edit distance. (2)

Question 6

Topic: Lecture 4
Source: Lecture 4

Iterative algorithms often require a stopping condition. Briefly explain why this is necessary, and why perplexity is a metric to use for stopping HMMs. (2)

Question 7

Topic: Lecture 1
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?) (1)

Question 8

Topic: Lecture 2
Source: Lecture 2

Why do outliers cause problems for clustering algorithms like k-means? How can we deal with them? (1)

Question 9

Topic: Long
Source: Lecture 1

We've all had an instance of autocorrect suggesting a bizarre correction for something. Given what you know about word similarity for error correction, explain why autocorrect doesn't always pick the word with the lowest edit distance. (3)

END OF QUIZ