START OF QUIZ
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Question 1

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 2

Topic: Lecture 4
Source: Lecture 4

Why can we use logarithms for the Viterbi algorithm, but not the forward algorithm? (1)

Question 3

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 4

Topic: Lecture 2
Source: Lecture 2

Imagine we were using k-means to cluster misspellings around their correct spellings. How many clusters would we need, and what would be a good distance function? Explain. (2)

Question 5

Topic: Lecture 3
Source: Lecture 3

Explain the purpose of Laplace smoothing, and how it accomplishes its goal. (1)

Question 6

Topic: Lecture 4
Source: Lecture 4

How is it that EM can arrive at a good solution, even if we have a random initialization of parameters? (1)

Question 7

Topic: Lecture 2
Source: Lecture 2

How do we choose the number of clusters for K-means? What are the consequences if we choose incorrectly? (2)

Question 8

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 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