START OF QUIZ
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Question 1

Topic: Lecture 1
Source: Lecture 1

When is cosine similarity appropriate as a similarity measure? (1)

Question 2

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

Question 3

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 4

If our vocabulary consists of just symbols A and B and our corpus consists of the sequence: A B B A A B and we build a bigram language model by applying add-one smoothing to the maximum likelihood estimate from the corpus, what is the probability P(B|A)? Please show your work. (2)

Question 5

Topic: Lecture 2
Source: Lecture 2

Why is the Forgy initialization sub-optimal? (1)

Question 6

Topic: Lecture 2
Source: Lecture 2

Are both K-means and agglomerative clustering iterative? Explain, and for each that is, explain when the algorithm ends. (1)

Question 7

Topic: Lecture 4
Source: Lecture 4

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

Question 8

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 9

Topic: Long
Source: Lecture 4

Please refer to the "Long" question from Lecture 4.

END OF QUIZ