# START OF QUIZ Student ID: 33399049,Cross,Ziggy

Topic: Topic2 Source: Lecture 2

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

Topic: Topic2 Source: Lecture 2

Why is the Forgy initialization sub-optimal?

Topic: Topic3 Source: Lecture 3

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

Topic: Topic4 Source: Lecture 4

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

Topic: Topic3 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.

Topic: Topic1 Source: Lecture 1

Explain why edit distance (given our formulation) will always choose a substitution, if it can.

Topic: Topic1 Source: Lecture 1

When is cosine similarity appropriate as a similarity measure?

Topic: Topic4 Source: Lecture 4

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

Topic: Coding Source: Lecture 2

Imagine we have three clusters [[X, Y], [M, N, P], [A, B, C, D]], and a point [R]. Write a function that determines which cluster to add R to, given the max linkage criterion.

# END OF QUIZ