

**START OF QUIZ**

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## Question 1

Topic: Lecture 7

Source: Lecture 7

How is the TextTiling algorithm similar to the Lesk algorithm? How is it different? (2)

## Question 2

Topic: Lecture 8

Source: Lecture 8

Why is it easy to create negative examples for lexical coherence tests? (1)

### Question 3

Topic: Lecture 7

Source: Lecture 7

Explain salience with respect to entities in a sentence (ie, when identifying Cf). (1)

## Question 4

Topic: Lecture 8

Source: Lecture 8

Describe a Discourse Unit. (1)

## Question 5

Topic: Lecture 6

Source: Lecture 6

Think back to week 1 of this block when we were doing word sense disambiguation. Do you think there would be disadvantages to disambiguating all words before running word2vec? Explain. (2)

## Question 6

Topic: Lecture 5

Source: Lecture 5

Which is likely to have the highest PMI? A rare word and a frequent word that appear together frequently, or two frequent words that appear together frequently? (1)

## Question 7

Topic: Lecture 6

Source: Lecture 6

We took a look at how vectors can be added / subtracted in vector space. Why does this work? (hint: think back to the general properties of word embeddings that we've wanted from the very start) (1)



## Question 8

Topic: Lecture 5

Source: Lecture 5

In class, we talked about how a "typical" dimensionality for embeddings is in the range of 100-500. What might be some consequences if we estimated too low or too high? (2)

## Question 9

Topic: Coding

Source: Coding

Write a short function that tries to find a good value for  $k$  in truncated SVD. You'll essentially be writing your own version of the evaluate word analogies function. For each of our the analogies, you'll need to do the vector math we were doing in the capital city determination, and return the 1-closest vector - if it's what we're looking for, it's correct. If not, it's wrong. (3)

**END OF QUIZ**