

**START OF QUIZ**

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## Question 1

Topic: Lecture 3

Source: Lecture 3

Identify the aspect of the following sentence: The special effects in Oppenheimer are subtle, but effective. (1)

## Question 2

Topic: Lecture 2

Source: Lecture 2

One of the goals of embeddings is that similar words are close to each other, and unrelated words are far apart. If we are using embeddings in our sentiment analysis toolkit, explain why we can't just "flip the polarity" of words modified by a negator (ie,  $[0.1, 0.3, 0.5] \rightarrow [-0.1, -0.3, -0.5]$ ) (2)

### Question 3

Topic: Lecture 1

Source: Lecture 1

Explain why it's harder to rank polarity for words than simply categorizing them as "positive", "negative", or "neutral". (2)

## Question 4

Topic: Lecture 4

Source: Lecture 4

What is the goal of multi-task learning? (1)

## Question 5

Topic: Lecture 3

Source: Lecture 3

Why is a dependency parser a key tool in the sentiment-analyst's toolkit? (1)

## Question 6

Topic: Lecture 1

Source: Lecture 1

Describe the Pollyanna principle, and how it complicates sentiment analysis. (1)

## Question 7

Topic: Lecture 4

Source: Lecture 4

What benefit does a Recursive NN have over a standard RNN that makes it particularly suited to sentiment analysis? (1)



## Question 8

Topic: Lecture 2

Source: Lecture 2

Sarcasm and irony are very difficult to detect with sentiment analysis methods. Outside of machine learning methods that consider larger contexts, do you think there is any way of detecting them with purely lexical (ie, word-based) resources? Briefly explain. (2)

## Question 9

Topic: Long

Source: Lecture 2

Imagine that it's the year 3000, and you discover an ancient corpus called "IMDB", written in the extinct language of "English". You can see that each document has a score out of 10 assigned to it. How would you go about creating a lexicon of polarity items, intensifiers, and negators (assume that NLP has not been solved by then, and you need to do it manually; furthermore, assume that there are no speakers of "English" left). (3)

**END OF QUIZ**