START OF QUIZ
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Question 1

Topic: Lecture 3
Source: Lecture 3

The sentences "The man ate a sandwich" and "The sandwich ate a man" are both syntactically correct (DET NN VB DT NN), but only the first one is semantically correct. With reference to theta roles, explain why this is the case. (1)

Question 2

Topic: Lecture 1
Source: Lecture 1

Briefly explain the role of a gazetteer, and one way of creating one. (1)

Question 3

Topic: Lecture 2
Source: Lecture 2

Explain how relation extraction and named entity recognition are related, and how they differ. (1)

Question 4

Topic: Lecture 4
Source: Lecture 4

We talked about a few other contraints for the ILP solver, such as making sure that "ARG0 must occur before ARG1". How would you implement this as an ILP constraint? (You don't need to write the pulp code - just explain how you would force the constraint.) (2)

Question 5

Topic: Lecture 1
Source: Lecture 1

Briefly describe the difference between micro- and macro-F1, which one is more appropriate for NER tagging, and why. (1)

Question 6

Topic: Lecture 4
Source: Lecture 4

In both of our neural examples for SRL, we provided an explicit indicator of the predicate (either as a binary feature, or as a separate feature to Bert). Why do you think this is necessary? (1)

Question 7

Topic: Lecture 3
Source: Lecture 3

How can semantic roles be used to identify relations in relation extraction? How can they help us identify false positives from our system? (2)

Question 8

Consider the following sentences: "James married Joyce in 2010. Their son Ulysses was born in 2013. In 2015, James and Joyce divorced." Extract all of the RDF triples you can from the sequence. (2)

Question 9

Assume that our fancy SR labeler has been run on the following sentence: "Do androids dream of electric sheep?" Imagine that we ran the sentence with 2 different predicates: "dream" and "do", and obtained the following scores. NP1 = (NP(NNs androids)) NP2 = (NP(JJ electric NNS sheep)) NP3 = (PP(of (NP2)) do: NP1: 0.5, 0.3 NP2: 0.3, 0.5 NP3: 0.2, 0.4 dream: NP1: 0.4, 0.6 NP2: 0.2, 0.3 NP3: 0.4, 0.7 Assuming the standard constraints we talked about in class, what is the most likely parse? Show your work! (3)

END OF QUIZ