START OF QUIZ
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Question 1

Topic: Lecture 3
Source: Lecture 3

Prove that A <-> B == A -> B & B -> A (1)

Question 2

Topic: Lecture 4
Source: Lecture 4

In class, we went over some common OWL and RDFS constraints that we can place on predicates, but we only ever attached one. Can you think of any instances of bivariate (ie, two parameter) predicates that could use multiple constraints? If so, briefly describe the predicate and its constraints, and if not, briefly describe why this is unnecessary. (2)

Question 3

Topic: Lecture 2
Source: Lecture 2

Describe why the "most frequent sense" baseline is so strong. What are some assumptions that it makes? (2)
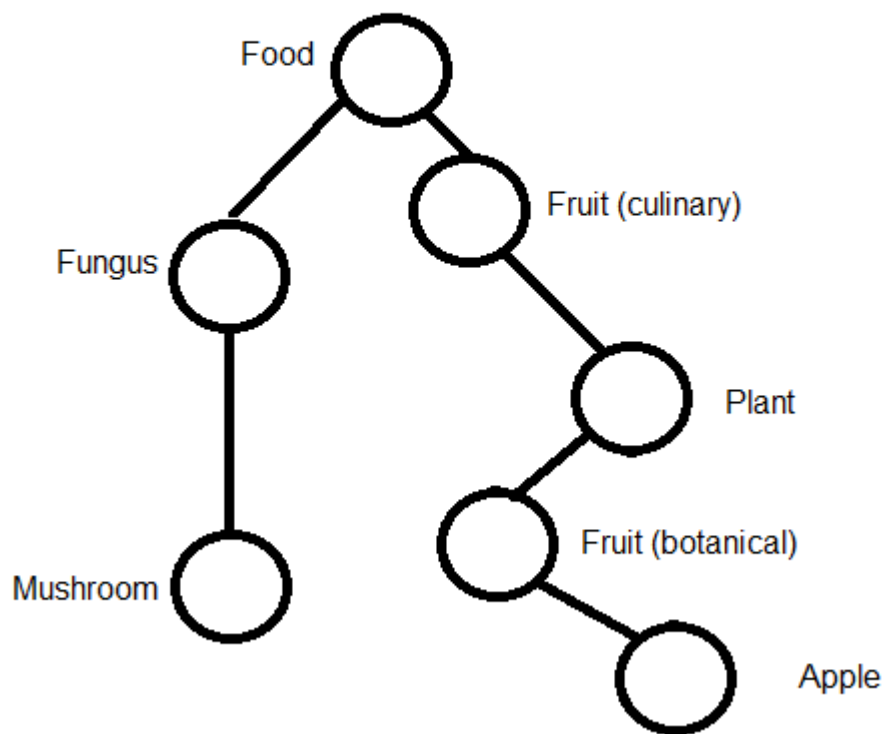
Question 4

Some verbs in English can take either one or two objects (such as "see" - I see a bird vs. I see a bird with binoculars). Explain, in terms of lambda calculus, why we would need separate predicates for these different uses of "see". (2)

Question 5

Topic: Lecture 1
Source: Lecture 1

Given the following tree, what is the WuP similarity between the two leaf nodes?

Question 6

Topic: Lecture 2
Source: Lecture 2

What is the underlying assumption of the Lesk Algorithm? (1)

Question 7

Given that A is False, B is False, and C is False, list 3 complex statements that are true, and 2 that are false. (1)

Question 8

Topic: Lecture 1
Source: Lecture 1

Why are antonyms conditioned on lemmas, instead of synsets? (1)

Question 9

Topic: Long
Source: Lecture 3

Write an FOL representation for the following sentences: Bats are the only mammals that fly. All squares are rectangles, but not all rectangles are squares. Vegetarians get protein from sources other than meat.

Some oranges are red.

END OF QUIZ