Homework 4 Part 2.

Please choose from:

Option 1:

Use Protégé to develop an ontology of a domain of your choice with at least 10 classes, at least 8 object properties, and 5 data properties. Declare individuals to test your ontology. Use a reasoner to show inferences and explain these results. Family ontology is a good domain for this project. For extra help, I have posted my version of the pizza ontology. Submit .owl file on BBLearn.

Option 2:

1. Determine the status of the following set of statements by means of the truth tables method first and then by the tableaux algorithm:

{¬A ∨ B, ¬(B & ¬C), C → D, ¬(¬A ∨ D)}

2.   Given the following set of sentences:

{P, (P & Q) → R, (S V T) → Q, T}

Prove R by using the tableaux algorithm.

3.       Prove the validity of the following formula using the tableaux algorithm:

(S → F) → ((S & H) → F)

Submit HARD COPY IN CLASS on April 29. Shaw a complete tableaux, make sure to mark all contradictions that close the tableaux.