CSE4107 Fall 2021

Class Test 1: Rational Agents, Knowledge Base & Reasoning.

Outline

1. Explain various aspects of the Agent concept with examples.
2. What are the characteristics of a rational agent?
3. Describe important concerns about the Environment for designing a rational agent.
4. Characterize and explain with examples Forward and Backward chaining algorithms with respect to inference in PL.
5. Give an illustrative example of limitations of logical inference.
6. Describe the syntactic rules of First Order Logic (FOL).
7. Express with an example the semantics of a query to knowledgebase in FOL.
8. How do you explain unification? Demonstrate the execution of the major steps of the simplified UNIFY algorithm using an example.
9. Explain with a suitable example the steps of conversion of a natural language sentence to a sentence in CNF of FOL.
10. State the resolution principle and demonstrate its application in proving the truth of a query to a KB in CNF of FOL.
11. Explain the resolution-refutation completeness of a KB.