Self test Questions for Slides Set #2

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Convince yourself that you know their answers.

1. What are the goals and subgoals in rule: puton(X, Y) :-...., on slide 2 page 2?

2. How the rule $puton(b, d)$ (on page 2) is computed?

3. How do you represent the rule "if p then q", mathematically?

4. In a rule: "if a, b, c then d", what are the goals and subgoals?

5. What are the rules and facts in the blocks world problem?

6. How the inference cycle works to infer from the rule $p \rightarrow q$ and fact p, and what is inference?

7. Is prolog interpreted or compiled language?

8. What is MYCIN?

9. Give applications of expert system.

10. What is "state-space" in AI search?

11. For the Fig. 3 (page # 7) in slide 2:

    (a) What is the sequence of states, when it is visited in BFS?
    (b) When it is visited in DFS?

12. What is sequence of states in DFS and BFS in Fig. 5 (slide 2)?

13. How the "Queue" data structure is different from "stack" data structure?

14. Does the Algorithm 1, page 10 in slide set 2, use stack or queue?

15. What is maximum number of nodes visited in a search of binary tree of hight n? (binary tree is a tree with two children for each node, except the bottom nodes).