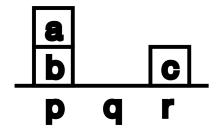
CM 2602 – Artificial Intelligence Tutorial 05

- 1. Define the term "Planning" as applied in Artificial Intelligence.
- 2. List and briefly describe challenges faced by standard searching when you compare it with planning.
- 3. Mention at least three facts that keep planning agents apart from problem solving agents.
- 4. What are the differences between planning and problem solving when you consider states, actions and execution.
- 5. Briefly explain the following terms that are useful when defining a planning system.
 - a. Domain description
 - b. Action Specification
 - c. Goal description
 - d. Preconditions
 - e. Effects
- 6. How does the classical planning differ from non-classical planning?
- 7. Briefly explain the two types of planning algorithms.
- 8. Define the concept of partial order planning in your own words. Give a real-life example of partial order planning.
- 9. Consider the "Spare Tire Problem" in AI planning. Mention the initial state, goal state and set of actions to have the spare tire in the axle and flat tire in the trunk. Now, write down STRIPS language statements for the above problem.
- 10. What are the STRIPS statements to solve the "Block World Problem" in the following case.



Go through the notebook available online at https://swish.swi-prolog.org/p/STRIPS%20Block%20World.swinb and examine how it is implemented in code level using Prolog.