**Tutorial 6**

**Part 1**

1) Atemporal predicates are: Fluent predicates are: where inside means x is inside y.

2) Initial state would be: .

3) Goal state would be: .

4) The actions would be the following: , Precondition: , Effect: )

, Precondition: , Effect: )

, Precondition: , Effect: )

**Part B**

A partial order plan consisting of two routes would be:

By combining these routes from start to end it would result in a complete plan to the goal.

An advantage of using partial-order planning over state-space search is that partial order planning allows more flexibility in terms of in which order the actions may be carried out.