Introduction to AI
-Tutorial Planning-

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STRIPS: rocket domain

1. Formulate the rocket domain below in STRIPS. There are three possible actions:
   - to load a piece of cargo into a rocket
   - to unload a piece of cargo from a rocket
   - to move a rocket from a location to another

   where
   - for a rocket to be moved, it must have fuel, and moving uses up fuel
   - for a piece of cargo to be loaded/unloaded into/from a rocket, cargo and rocket must be at the same location
2. Modify your formulation of the *rocket domain* to accommodate fuel as a resource that can be consumed and produced

Graph-plan

Apply GRAPHPLAN to the shopping domain with

actions:

Go(x) *preconditions: At(s),x≠y* *effects: At(x), ¬At(y)*

Buy(x) *preconditions: At(s),Sells(s,x)* *effects: Have(x)*

start state: *At(H),Sells(BS,B),Sells(SM,A),Sells(SM,M)*

goal: *At(H), Have(M),Have(A),Have(B)*

Show explicitly the graph (including mutex) for S0, A0, S1

Return the computed plan explicitly, and indicate the level at which the plan can be extracted.