Assignment Seven: Planning
Due: 11:59pm, Monday 12 March 2018.

This can be done in groups of size 1, 2 or 3. Working alone is not recommended. All members of the group need to be able to explain the group’s answer.
Submit your answers in individual files using Canvas. Use proper sentences in your answers.
Ask questions on Canvas discussion board. Feel free to answer them too.

Question One
Write a heuristic for the regression planner that works better than the provided heuristic(s) in the Python distribution. (You can use one of the problem variants from the last assignment, as long as you are clear what the problem this is for). You must provide evidence that this is better.

Question Two
Consider the CSP representation of the running planning problem we have been using. Either give the constraint in Python or just give a formula that represents the constraint.

(a) Specify the precondition constraint for the action pum.
(b) Specify the effect constraint for the action pum.
(c) Specify the frame constraint for RHC.
(d) Suppose the problem has initial state {"RLoc": lab, "MW": True, "SWC": True, "RHC": False, "RHM": False}, and goal {"SWC": False} and a planning horizon of 3.
   i) What is the initial state constraint?
   ii) What is the goal constraint?
   iii) What is a solution found?
(e) What is the smallest planning horizon for which the problem in part (d) has a solution?

Question Three
For each question, specify how long you spend on it, and what you learned. How was the work in the team allocated? Was the question reasonable? (This questions is worth marks, so please do it!)