

Deadline: 22nd September, 2024 midnight.

Consider the following grid:

[Total marks 30]

X		End
Start		X

You have to plan for a robot to go from start to end. The robot can only move left, right, bottom, or up. Also, the robot cannot visit the grids marked as 'X'.

1. Define a Heuristic value which gives the Euclidian distance from a current node to the goal node. Construct the problem graph with this Heuristic value. [10]
2. Implement Greedy search to use this Heuristics, to find a path to the goal node. [10]
3. Implement A* algorithm using the same Heuristics to find a path to the goal node. [10]