Project – 2

ENPM 661

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Instructions to run the code.

1) Extract the folder “patel_project2” to any of your folders.
2) “patel_project2” contains following files
    I. Main Code
        a) code.m
    II. Pre-defined functions
        a) Constrains.m
        b) moveleft.m
        c) moveright.m
        d) moveup.m
        e) movedown.m
        f) moveupleft.m
        g) moveupright.m
        h) movedownleft.m
        i) movedownright.m
    III. Information files
        a) README
    IV. Output folder which contains following files (Nodes, NodeInfo and Output_plot)
        a) Output (It has all the generated x and y points and their parent info)
        b) Output_plot (It has one example plot)

3) Open MATLAB
4) Locate the folder named “patel_project2” in MATLAB by providing the path of the folder “patel_project2”.
5) Now open the source code named code.m.
6) When the code.m script is run, it will ask for x and y co-ordinates of start and goal points.
7) It will start generating the nodes. The program will terminate when it reaches the goal point. I have ran the code for start point (158, 60) and goal point (188 ,60). Which are stored in “output” file in output folder, the plot is stored in “output_plot” file.
8) The information about any of the nodes can be accessed by running NodeInfo(p) code in command window. Here the p shows the node number. It will give [Parent node#,] as output. Any Nodeset can be accessed by typing x(p) and y(p) in command window, where p is the node number.