Installation Guide

Store all the python and task files in the same folder.

1. **Run cbs_optimal.ipynb**
2. **Run heuristics.ipynb**

Test case :

File name - test_case.task

- 1st line contains two integers **m** and **n** denotes the number of rows and columns in the grid next **m** lines each consist of **n** columns made up of 0,1,2 where 1 represents a normal cell, 2 represents a blocked cell and 2 represents temporary storage locations.
- The next line contains an integer **r** denoting the number of Robots followed by r lines which contain x y coordinates of the staring and the end position of the Robots.
- The next line contains **t** number of tasks followed by t number of line each containing the starting x y coordinates and the end x y coordinates.

Note - The user can change the input inside code/input/input.task file and again run the ipynb files mentioned above to get the desired results.

Results :

1. **Optimal Results are printed at the end of cbs_optimal.ipynb**

2. **Heuristics Results are printed at the end of heuristics.ipynb**