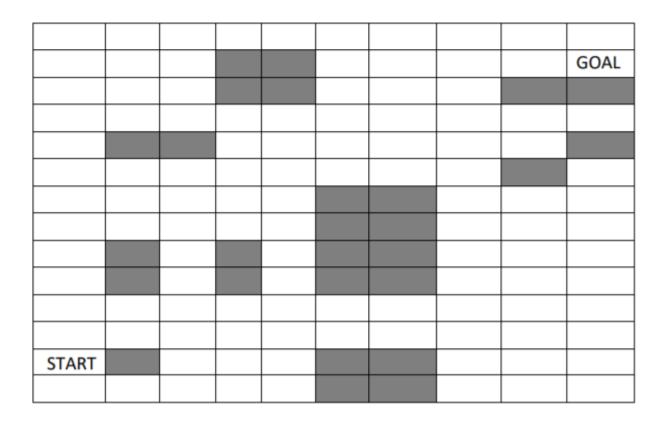
PROBLEM

Design a robot navigation Agent, which can conduct blind searches to find its path from start to goal state. As input, the system will take a description of the maize stored as a text file. The maize is a 2x2 grid with obstacles inside it. An example of such a maize is given below:



The obstacles are filled rectangles of unknown dimensions and can be found anywhere in the maize. The robot cannot be in those cells. There are 3 actions allowed. Up one cell (cost is 1), right one cell (cost is 3), diagonally up towards the right (cost is 2).

The system will output:

1. The complete path if goal is found otherwise show path's followed by algorithm to search for goal

- 2. The sequence of actions performed to reach the goal from start
- 3. The total cost of the path
- 4. A grid which shows the path followed. You do not need graphics for this output. The grid can be made textually using 1 for obstacles, 0 for empty cells and '#' for path followed.

Format of input file:

- dimensions of the grid (line one TotalCols x TotalRows)
- start coordinates (line two)
- goal coordinates (line three)
- the grid itself (one line per row). There will be a zero for no obstacle and one for an (for gird please see grid.txt file)