

TDT4136 - Exercise 2

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Implementation

Adjecency list was used over neighbor matrix as the graph is sparse.

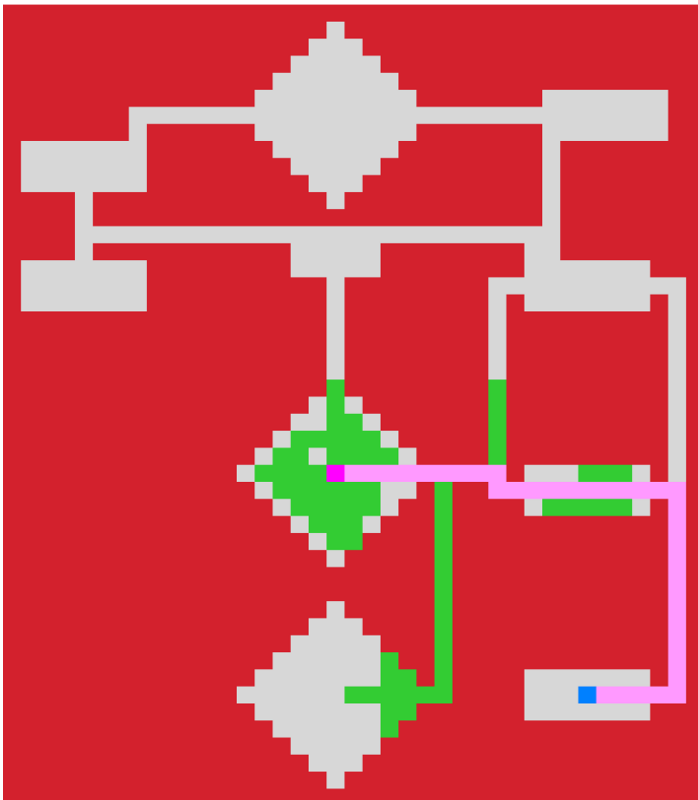
Manhattan distance was used for heuristic function over euclidian distance as movements are only vertical or horizontal, not diagonal.

The A* algorithm was handwritten with the help of the assignment material provided as well as [this](#) article.

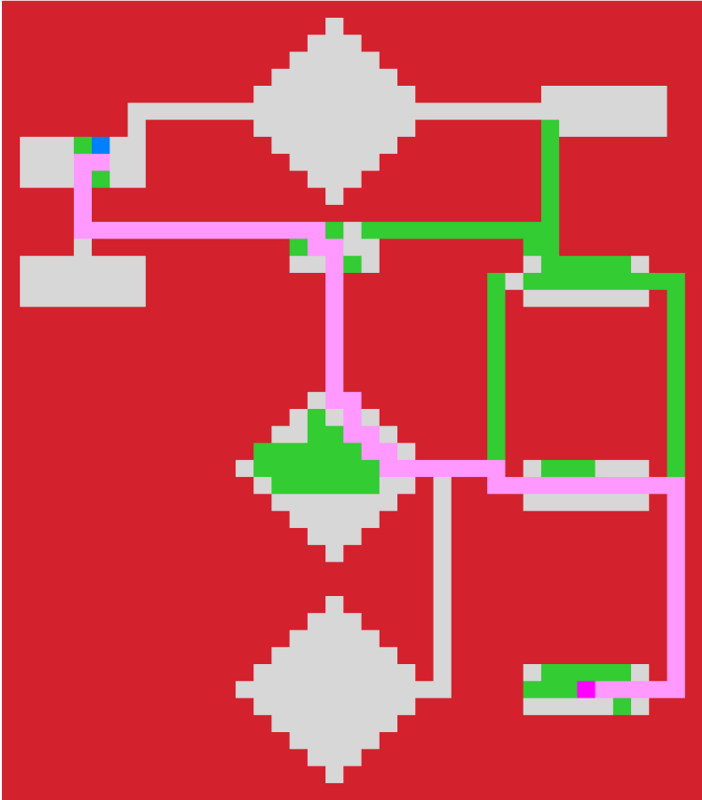
Results

The pink line represents the shortest path. Green pixels are opened nodes. Dark pink is the start, and blue is the goal.

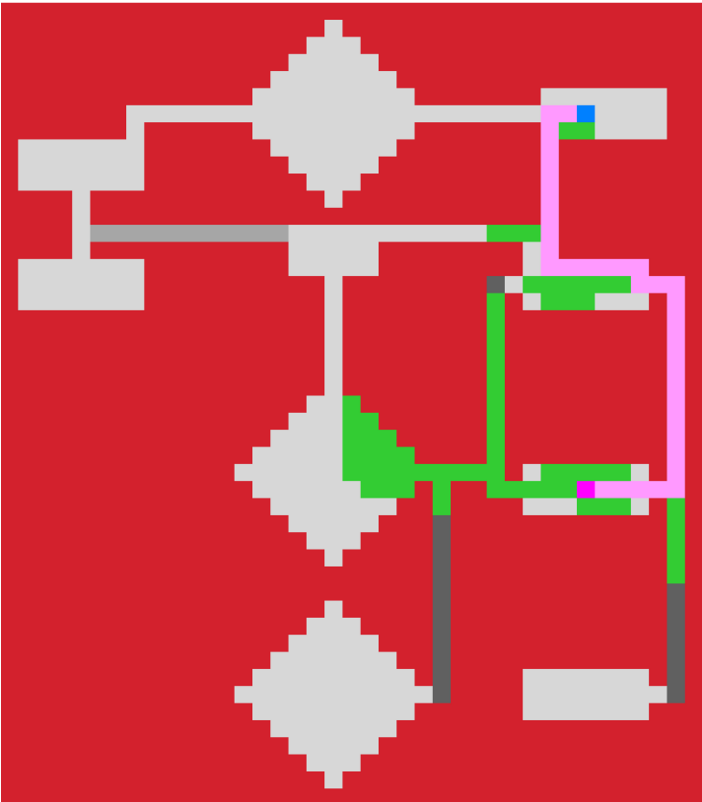
Task 1



Task 2



Task 3



Task 4

