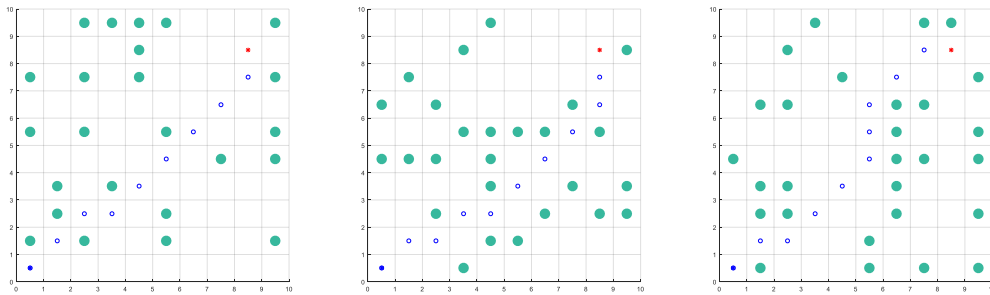# 1 Simulation results (3 random maps)

2 Results analysis

In this homework, A * search is applied for a 2-D grid map. I used Euclidian distance as a heuristic, which is always admissible. Therefore, A* search is always optimal and can find the optimal path. And it will explore far less nodes than Dijkstra algorithm.

3 Implementation notes

This MATLAB code is not efficient. To improve it:

- Using priority heap as a container
- Making full use of matrix operation of MATALAB instead of for loop