EECE3326, Optimization Methods
Department of Electrical and Computer Engineering

Project #5

Part b

A shortest path in a maze is a path from the start to the goal with the smallest number of steps. Write three functions `findShortestPath1`, `findShortestPath2` and `findShortestPath3` that each find a shortest path in a maze if a path from the start to the goal exists.

The first algorithm should use a depth-first search. The second algorithm should use a breadth-first search. The third algorithm should use Dijkstra algorithm for shortest paths.

In each case, if a solution exists the solver should simulate the solution to each maze by calling the `maze::print()` function after each move.

Each function should return `true` if any paths are found, and `false` otherwise.