Andrea Baretta

January 31, 2023

Professor Smallberg

Homework 2 Write-Up

1. Given the algorithm, main function, and maze shown at the end of problem 1, what are the first 12 (r,c) coordinates popped off the stack by the algorithm?

The first 12 coordinates popped off the stack by the algorithm are as follows:

Explored coord: (5,3)

Explored coord: (6,3)

Explored coord: (4,3)

Explored coord: (4,2)

Explored coord: (4,1)

Explored coord: (3,1)

Explored coord: (2,1)

Explored coord: (1,1)

Explored coord: (1,2)

Explored coord: (3,3)

Explored coord: (5,4)

Explored coord: (5,5)

1. Given the same main function and maze as are shown at the end of problem 1, what are the first 12 (r,c) coordinates popped from the queue in your queue-based algorithm?

The first 12 coordinates popped off the queue by the algorithm are as follows:

Explored coord: (5,3)

Explored coord: (5,4)

Explored coord: (4,3)

Explored coord: (6,3)

Explored coord: (5,5)

Explored coord: (3,3)

Explored coord: (4,2)

Explored coord: (5,6)

Explored coord: (4,5)

Explored coord: (4,1)

Explored coord: (5,7)

Explored coord: (3,5)