

CS 312: Artificial Intelligence Laboratory

Task 1: Test Cases

Sample Input 1 (BFS): 0 <pre>+---+---+---+---+ + + + + + +---+---+ +---+ + + +---+ + * +---+---+---+---+</pre>	Sample Output 1: 42 24 0---+---+---+---+ 00 0000 +0 +0 +0 + + 0000 0 +---+---+0 +---+ 0000 + + +---+0 + 000 +---+---+---+---+	
Sample Input 2 (DFS): 1 <pre>+---+---+---+---+ + + + + + +---+---+ +---+ + + +---+ + * +---+---+---+---+</pre>	Sample Output 2: 24 24 0---+---+---+---+ 00 0000 +0 +0 +0 + + 0000 0 +---+---+0 +---+ 0000 + + +---+0 + 000 +---+---+---+---+	Sample Output 2 (Alternate) 46 26 0---+---+---+---+ 000 0000 + 0+ 0+ 0+ + 0000 00 +---+---+0 +---+ 00000 + + +---+ 0+ 00 +---+---+---+---+
Sample Input 3 (DFID): 2 <pre>+---+---+---+---+ + + + + + +---+---+ +---+ + + +---+ + * +---+---+---+---+</pre>	Sample Output 3: 621 24 0---+---+---+---+ 00 0000 +0 +0 +0 + + 0000 0 +---+---+0 +---+ 0000 + + +---+0 + 000 +---+---+---+---+	Sample Output 3 (Alternate) 862 24 0---+---+---+---+ 000 0000 + 0+ 0+ 0+ + 0000 0 +---+---+ 0+---+ 0000 + + +---+ 0+ 00 +---+---+---+---+

Sample Input 4 (BFS): 0 <pre> +---+---+---+---+ +---+ + + + + + +---+ +---+ + + +---+---+---+ + + +---+ + + + * +---+---+---+---+ </pre>	Sample Output 4: 59 33 <pre> 0---+---+---+---+ 000000 +---+0 + + + + 000 + 0+---+ +---+ + 0 + 0+---+---+---+ + 000000 0000 + +---+0 +0 +0 + 0000 000 +---+---+---+---+ </pre>	
Sample Input 5 (DFS): 1 <pre> +---+---+---+---+ +---+ + + + + + +---+ +---+ + + +---+---+---+ + + +---+ + + + * +---+---+---+---+ </pre>	Sample Output 5: 41 33 <pre> 0---+---+---+---+ 000000 +---+0 + + + + 000 + 0+---+ +---+ + 0 + 0+---+---+---+ + 000000 0000 + +---+0 +0 +0 + 0000 000 +---+---+---+---+ </pre>	Sample Output 5 (Alternate) 82 37 <pre> 0---+---+---+---+ 000000 +---+ 0+ + + + 00000 +0 +---+ +---+ + 00 + 0+---+---+---+ + 0000000 0000 + +---+ 0+ 0+ 0+ 0000 00 +---+---+---+---+ </pre>
Sample Input 6 (DFID): 2 <pre> +---+---+---+---+ +---+ + + + + + +---+ +---+ + + +---+---+---+ + + +---+ + + + * +---+---+---+---+ </pre>	Sample Output 6: 1358 33 <pre> 0---+---+---+---+ 000000 +---+0 + + + + 000 + 0+---+ +---+ + 0 + 0+---+---+---+ + 000000 0000 + +---+0 +0 +0 + 0000 000 +---+---+---+---+ </pre>	Sample Output 6 (Alternate) 2172 33 <pre> 0---+---+---+---+ 000000 +---+0 + + + + 000 + 0+---+ +---+ + 0 + 0+---+---+---+ + 0000000 0000 + +---+ 0+ 0+ 0+ 0000 00 +---+---+---+---+ </pre>

To test your solutions, you can generate more mazes from [here](#). (Put the type of maze as text.)

Note: For submission, use this preference order for adding neighbors:
DOWN > UP > RIGHT > LEFT.

Deadline: 11:55 PM, 15 Jan 2021

For Reference :

State-space search: <https://youtu.be/52nI2IPyOu8>

BFS and DFS: <https://youtu.be/TMLyKcBtHuo>

DFID: <https://youtu.be/xIEe0yK1VL4>