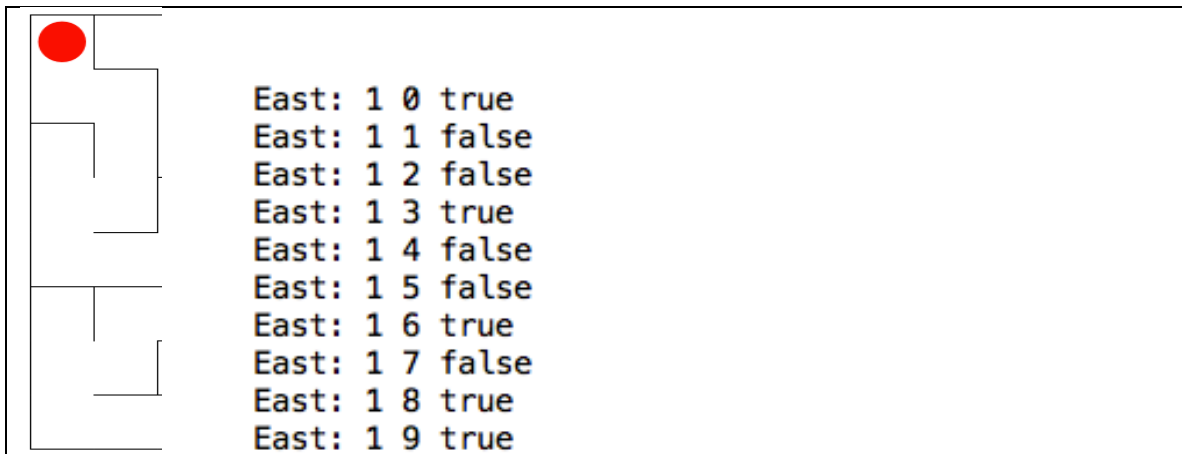


Assignment 2 (20 points)

Due Date: 9/25/2022 (11:59pm)

Description: In this assignment, you will write a Java program to determine a path from the start (1, n) of a maze to the finish (n, 1) of the maze where n is the size of the maze. You **MUST** use a stack to solve the problem.

Understand the Data: The maze is square and the size is n x n. The lower left position is (1, 1) and the upper right position is (n, n). The starting position is at position (1, n). When you reach the position (n, 1), you have found the exit and you are done. The maze is characterized by four boolean arrays (north, east, south, and west) indicating the walls where a wall is present in a particular direction if it is true. See the following figure as an example.



When you move to the next position, you should call "drawDot(x, y, "BLUE")". When you backtrack to the previous position, you should mark the backtracked position by calling "drawDot(x, y, "GRAY")".

In this assignment, you are provided an "StdDraw.java" for drawing a maze and dots. To compile with the source file,

```
>> javac Maze.java StdDraw.java
```

In addition, your program should read a maze file from the command prompt.

```
>> java Maze maze16.txt
```

Submission

Submit your java code to blackboard