1. Given a random start location, think of an algorithm that does not use recursion that would find its way to the exit S. Your algorithm should be able to run on an arbitrary maze, and not be specific to the sample given above. Can your algorithm avoid going in circles? Describe your algorithm.
   1. The algorithm would go down the first available path each time, keeping track of where it has been. If it hits a dead end, it will backtrack until it reached the next unexplored break in the wall. It would go down that path, marking its track until it reached another dead end. Then, it would backtrack once again until it found another unsearched path in the maze.
2. Think of a way to have a computer program generate a random maze. What are important criteria that a good maze should have? Describe how your algorithm could possibly meet the criteria.
   1. Important criteria for a good maze are: An accessible exit with only one path to the entrance, and multiple other paths with dead ends. The path to the entrance would need to have more than 5 turns. An algorithm to do that would randomly generate a maze, making sure there is only one path to the exit but more than one path in the maze. The path to the exit would need to change directions at least 5 times.