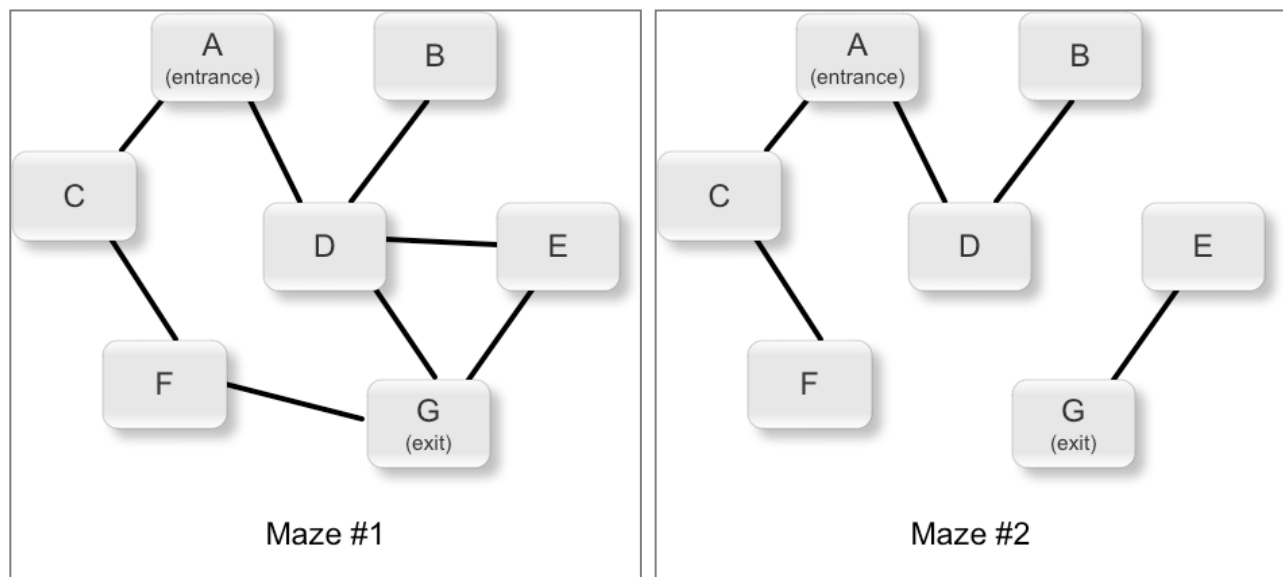


Homework #8

In this assignment you will write an algorithm that determines whether there is a path through a maze. A maze will be represented as an undirected graph with each room represented as a vertex and each corridor represented as a pair of edges. Each room will be uniquely identified by a single character label.

Here are two sample mazes that will be used to test your implementation (notice that maze #1 has a path from the entrance to exit but maze #2 does not):



All code implemented in this assignment should be in a class called `Homework8`. You may use the data structures and algorithm code from the lecture notes.

a) **(9 points)** Implement the following method:

```
public static boolean isExitReachable(
    Graph maze,
    char entrance,
    char exit)
```

This method should return whether a path exists from `entrance` to `exit`.

Demonstrate your method working with mazes #1 & #2. *Note, your implementation must work with any maze even though you are only required to demonstrate success with mazes #1 & #2.*

b) **(1 point)** Make sure your source code is well-commented, consistently formatted, uses no magic numbers/values, and follows programming best-practices.

Turn in all source code, program output, diagrams, and answers to questions in a single PDF document.