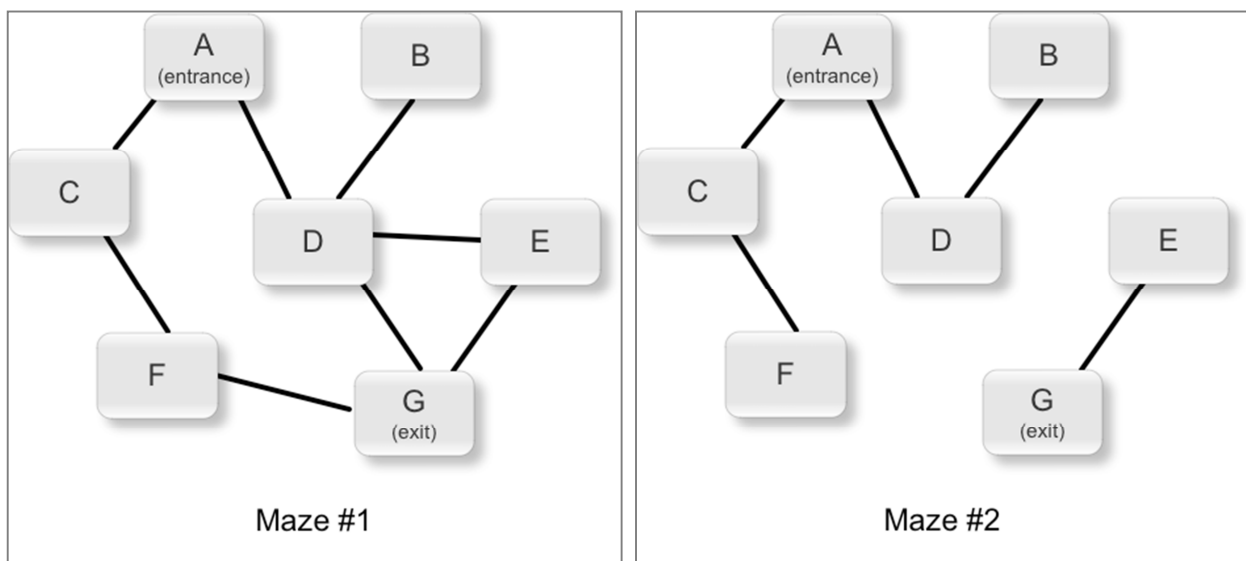


Homework #8

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):



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

```
int isExitReachable(Graph *pMaze, char entrance, char exit);
```

- This function should return whether a path exists from `entrance` to `exit`. A non-zero return value indicates that a path exists; a zero return value indicates that no path exists.

Demonstrate your function working with mazes #1 & #2. *Note, your implementation must be generic (i.e. 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, follows programming best-practices, and is ANSI-compliant.

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