1. What is the running time of the breadth first search (BFS) algorithm in the worst case?

O(V)

O(V2)

O(E+V)

2. Which of the following is true about code refactoring? Select all that apply.

It is common during code development

It should be avoided unless absolutely necessary

It refers to the process of changing the structure of the code without changing its functionality

It generally changes the code's public interface.

3. Which of the following is/are true about Depth First Search (DFS)?

In the worst case, depth first search is more efficient than breadth first search

DFS usually finds a shorter path (in terms of number of nodes) than BFS

DFS uses a Stack to hold the list of unexplored nodes.

DFS has a straightforward recursive solution.

DFS will always find a path from Start to Goal if there is one.

4. Which of the following is the better representation for the MapGraph graph that you implemented in the programming project this week?

Adjacency List

Adjacency Matrix