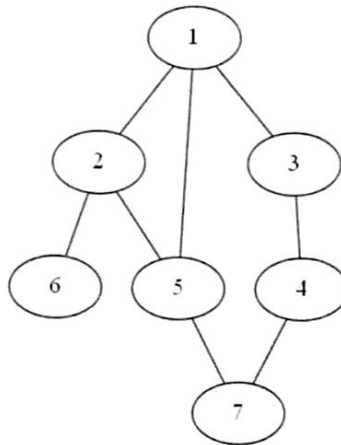


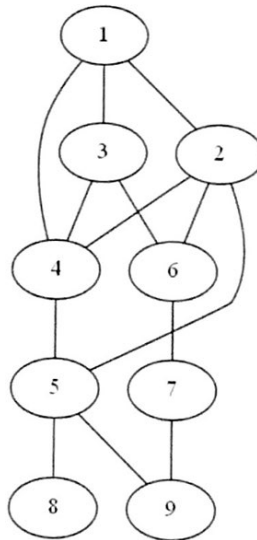
Name: Julia NelsonDate: 02/29/2020Pledge: "I pledge my honor that I have abided by the Stevens Honor System."

For each of the graphs below, list the order in which the vertices are visited in a **breadth-first search**, starting with vertex 1. If there are multiple vertices adjacent to a given vertex, visit the adjacent vertex with the lowest value first. Then repeat the process for **depth-first search**.

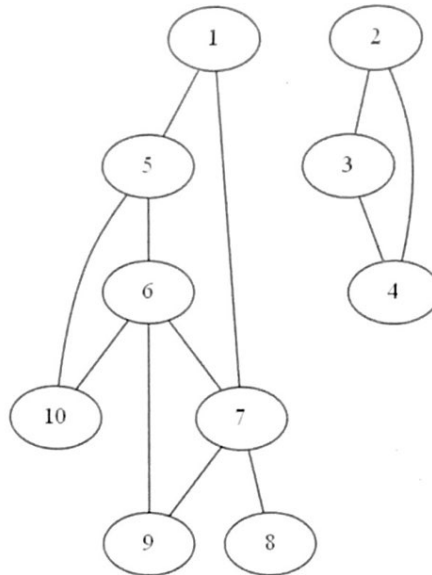
1.

BFS: 1, 2, 3, 5, 6, 4, 7DFS: 1, 2, 5, 7, 4, 3, 6

2.

BFS: 1, 2, 3, 4, 5, 6, 8, 9, 7DFS: 1, 2, 4, 3, 6, 7, 9, 5, 8

3.

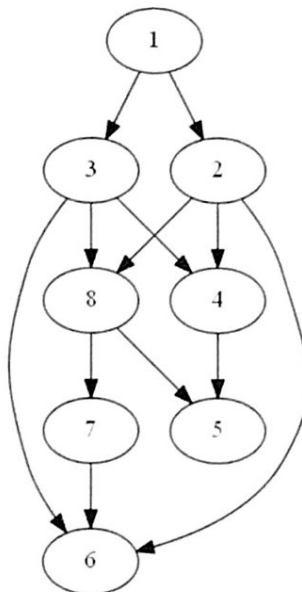


BFS: 2, 3, 4  
DFS: 2, 3, 4

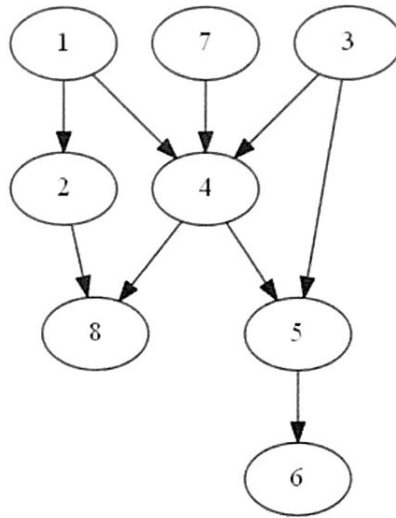
BFS: 1, 5, 7, 6, 10, 8, 9DFS: 1, 5, 6, 7, 8, 9, 10

For each of the graphs below, list the order in which the vertices are visited in a **topological sort**, starting with vertex 1. If there are multiple vertices adjacent to a given vertex, visit the adjacent vertex with the lowest value first.

4.

Topological sort: 1, 2, 3, 4, 8, 5, 7, 6

5.

Topological sort: 1, 2, 3, 7, 4, 5, 8, 6