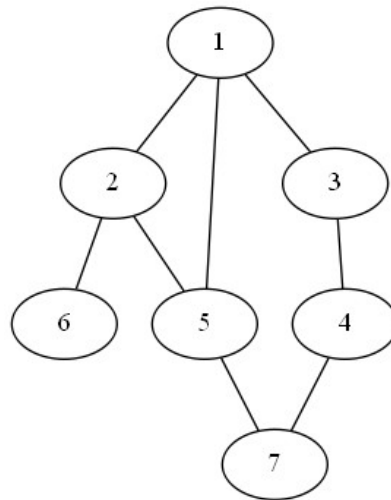


Name: Joshua SchmidtDate: 10/3/2019

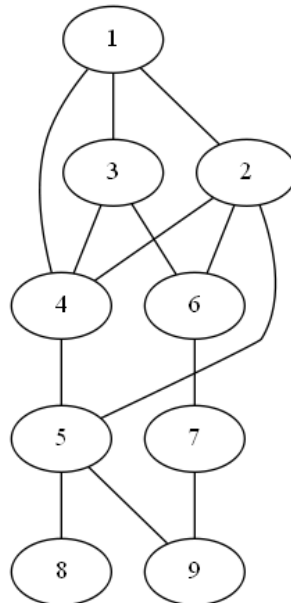
Pledge: _____

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**.

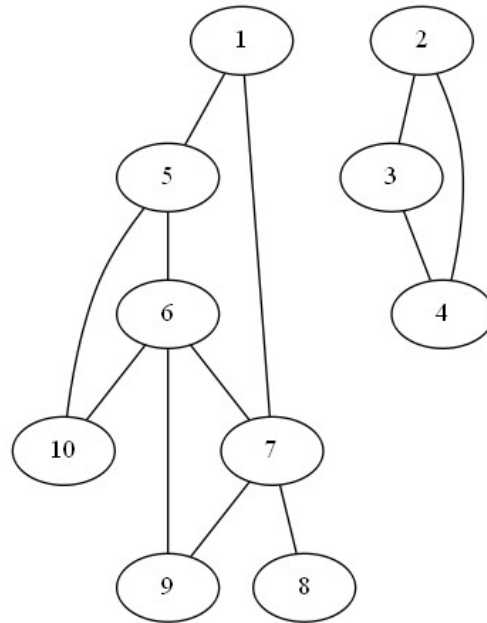
1.

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

2.

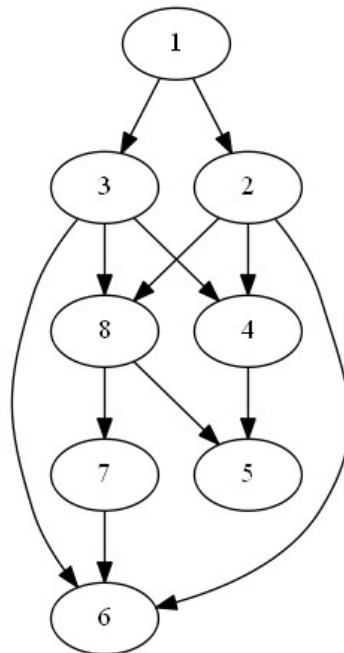
BFS: 1 2 3 4 5 6 8 9 7DFS: 1 2 4 5 8 9 7 6 3

3.

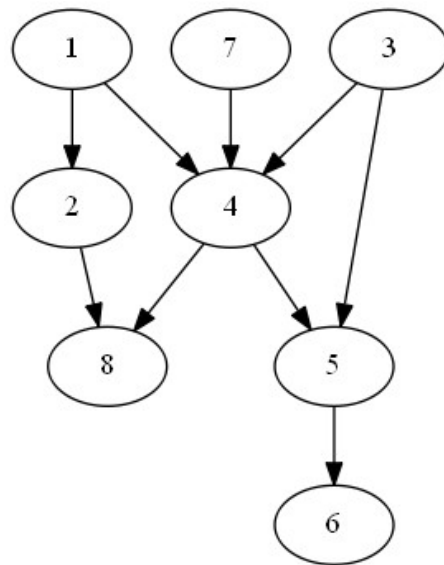
BFS: 1 5 7 6 10 8 9 2 3 4DFS: 1 5 6 7 8 9 10 2 3 4

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 3 7 2 4 5 8 6