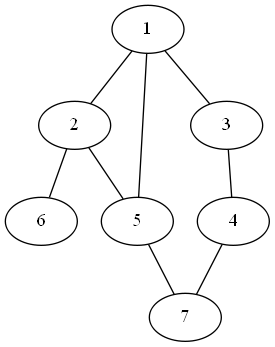
Name: \_\_\_\_\_Khayyam Saleem\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_10/07/16\_\_\_\_\_\_\_

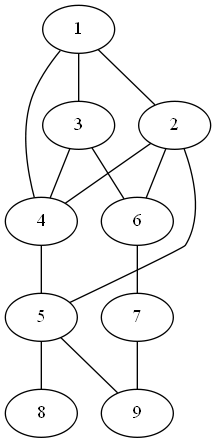
Pledge: \_\_\_\_\_I pledge my honor that I have abided by the Stevens Honor System.\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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. 

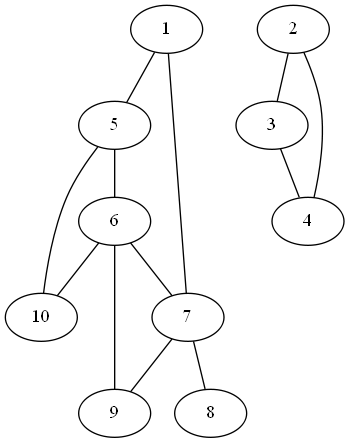
BFS: \_\_\_\_\_\_\_\_\_\_\_\_1, 2, 3, 5, 6, 4, 7\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DFS: \_\_\_\_\_\_\_\_\_\_\_\_1, 2, 5, 7, 4, 3, 6\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 

BFS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_1, 2, 3, 4, 5, 6, 8, 9, 7\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

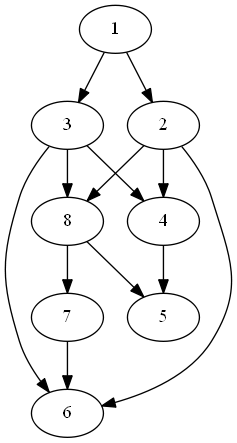
DFS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_1, 2, 4, 3, 6, 7, 9, 5, 8\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 

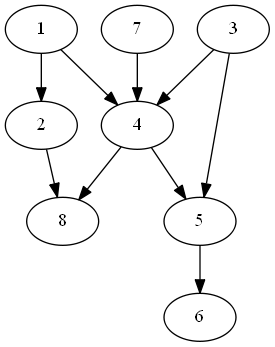
BFS: \_\_\_\_\_\_\_\_\_\_1, 5, 7, 6, 10, 9, 8, 2, 3, 4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DFS: \_\_\_\_\_\_\_\_\_\_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.

1. 

Topological sort: \_\_\_\_\_\_\_\_1, 2, 3, 4, 8, 5, 7, 6\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 

Topological sort: \_\_\_\_\_\_\_\_\_\_\_\_1, 2, 3, 7, 4, 5, 6, 8\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_