**Lab-2 Exercises**

Write Programs to perform the following and find the time complexity using step count method:

1. Depth First Search (DFS)

2. Breadth First Search (BFS)

3. To find mother vertex in a graph

4. To find transpose of a given graph

**Additional Exercises**

Write a Program to input a graph from the user (nodes should be given numbers 1, 2,.. upto n) and perform the following:

1. Display the nodes with even number using BFS.

2. Display the nodes with odd number using DFS.

3. Count the number of nodes at given level in a tree using BFS

4. Cycles of length n in an undirected and connected graph