# DATA STRUCTURE AND PROGRAM DESIGN LAB – 07

Consider the undirected graph G, consisting of n nodes laid out in a 3 -by- 3 grid: Start searching at node 1, and break ties for exploring the next node based on lower numerical order (i.e. add nodes to a queue low to high, add nodes to a stack high to low). (a) In what order are nodes marked as explored by BFS? (b) In what order are nodes marked as explored by DFS?

SAMPLE OUTPUT:

```
PS C:\Users\prach\OneDrive\Desktop\DSPD LAB> gcc Practical-7.c
PS C:\Users\prach\OneDrive\Desktop\DSPD LAB> ./a.exe
Enter number of nodes: 3
Enter number of edges: 3
Enter edge 1 (u v): 8 11
Enter edge 2 (u v): 11 8
Enter edge 3 (u v): 85 95
BFS: 1
DFS: 1
PS C:\Users\prach\OneDrive\Desktop\DSPD LAB>
```