

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:

```
64         visited[i] = 0;
65         printf("DFS Traversal: ");
66         DFS(start);
67
68         printf("\n");
69         return 0;
```

PROBLEMS OUTPUT TERMINAL ... powershell + v

```
Enter number of nodes: 6
Enter number of edges: 5
Enter each edge (u v):
1 2
1 4
2 3
2 5
3 6
Enter starting node: 1
BFS Traversal: 1 2 4 3 5 6
DFS Traversal: 1 2 3 6 5 4
PS C:\Users\Ankush\OneDrive\Desktop\DSPD-LAB>
```