Implement Depth Limited Search (Uninformed Search)

- 1. You are given an undirected or bidirected graph and a source from which you will start your journey. You have to find and print the list of vertices you can go from the source vertice given as input.
- a. First will have the total number of nodes (n) and the total number of edges (m).
- b. Next m lines will be followed by m pairs of integers denoting the bi-directional edges.
 - i. a b
 - 1. It means there is a connection from **a to b** and
 - 2. Also, a connection from **b** to a.
- c. Then a single integer **s** denoting the source.
- d. Then a single integer **d** denoting the depth limit for the search.
 - 2. Use the idea of Graph traversal to solve the problem. Use **Recursion** for this task.
 - 3. Outputs:
- . Print the nodes in the order they are getting explored starting from the source node including in which depth level they were explored.
- a. Maximum depth Reached for the corresponding DFS.

Input #1	Output#1
14 12	Explored o at depth o
0 1	Explored 1 at depth 1
0 4	Explored 3 at depth 2
0 2	Explored 5 at depth 3
13	Explored 4 at depth 2
14	Explored 2 at depth 1
35	Explored 11 at depth 2
56	Explored 10 at depth 3
57	
68	
2 11	Maximum Depth reached: 3
11 10	
9 13	
0	
3	
Input #2	Output#2

14 10	Explored 4 at depth o
01	Explored o at depth 1
0 2	Explored 1 at depth 2
0 4	Explored 3 at depth 3
13	Explored 5 at depth 4
14	Explored 2 at depth 2
2 11	Explored 11 at depth 3
35	<u> </u>
67	Maximum Depth reached: 4
89	Maximum Depth Teached. 4
10 13	
4	
6	
0	
Input #3	Output#3
Input #3	
<i>Input #3</i> 75	Output#3 Explored 6 at depth o
7 5 1 2	Explored 6 at depth o
7 5 1 2 1 4	
7 5 1 2 1 4 2 5	Explored 6 at depth o
75 12 14 25 36	Explored 6 at depth o
75 12 14 25 36 06	Explored 6 at depth o
75 12 14 25 36	Explored 6 at depth o