CSN-261: Data Structures Laboratory

Lab Assignment 9 (L9)

Instruction: Use Java for solving the assignment.

Q1. You are given an adjacency matrix representation of an undirected graph G.

   a. Perform the BFS and DFS traversal on G (starting from vertex 0).
   b. Find out the minimum number of edges 'k' that should be removed from G such that BFS and DFS traversals produce an identical sequence.

Input Format: Single integer n which is the number of vertices in the graph. Followed by n rows, each with n integers (0/1: Absence/Presence of an edge)

Output Format: The first and second lines display the BFS and DFS traversal, respectively. The third line displays the number 'k' of edges needs to be removed. The next 'k' lines display the edges to be removed.

```
Input 1:

6
0       1       1       0       0       0
1       0       1       0       0       0
1       1       0       1       1       0
0       0       1       0       0       1
0       0       1       0       0       1
0       0       0       1       1       0


Output 1:
BFS: 0 1 2 3 4 5
DFS: 0 1 2 3 5 4
1
3 5
```