

```

/*
    Time complexity:  $O(V + E)$ 
    Space complexity:  $O(V^2)$ 

    where V is the number of vertices in the input graph and
    E is the number of edges in the input graph
*/

import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class Solution {
    static BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
    public static void DFS(int[][] edges, int sv, boolean[] visited) {
        visited[sv] = true;
        for(int i = 0; i < edges.length; i++) {
            if(edges[sv][i] == 1 && !visited[i]) {
                DFS(edges, i, visited);
                visited[i] = true;
            }
        }
    }

    public static boolean isConnected(int[][] edges) {
        boolean[] visited = new boolean[edges.length];

        DFS(edges, 0, visited);

        for(int i = 0; i < visited.length; i++) {
            if(!visited[i]) {
                return false;
            }
        }

        return true;
    }

    public static void main(String[] args) throws NumberFormatException, IOException {
        String[] strNums;
        strNums = br.readLine().split("\\s");
        int n = Integer.parseInt(strNums[0]);
        int e = Integer.parseInt(strNums[1]);
        if (n==0){
            System.out.println("true");
            return;
        }
    }
}

```

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        int edges[][] = new int[n][n];

    for (int i = 0; i < e; i++) {
        String[] strNums1;
        strNums1 = br.readLine().split("\\s");
        int fv = Integer.parseInt(strNums1[0]);
        int sv = Integer.parseInt(strNums1[1]);
        edges[fv][sv] = 1;
        edges[sv][fv] = 1;
    }

        System.out.println(isConnected(edges));
    }

}
```