

LAB-XI

Date: **Nov 07, 2024.**

You need to upload your solutions of Q1 and Q2 to canvas portal before 05:30pm on Nov 07, 2024.

1. Write a program to find all the cut edges (if exists) in a connected undirected graph G . If there are no cut edges in G , your program should output 'none'.
2. Write a program to find all the cut vertices (if exists) in a connected undirected graph G . If there are no cut vertices in G , your program should output 'none'.
3. We know that topological ordering of a directed graph G exists iff G is a DAG. Suppose, G is not a DAG, and every vertex of G has in-degree at most one. Write a program to find a minimum size subset S of vertices whose deletion makes G acyclic (that is $G - S$ is acyclic).