

## LAB-XII

Date: **Nov 16, 2024.**

You need to upload your solutions of Q1 and Q2 to canvas portal before 11:30pm on Nov 17, 2024.

1. Write a program to implement the Dijkstra's algorithm using priority queues. Assume that input graph is represented using adjacency list representation.
2. Let  $G$  be a weighted (edge weights may be negative) directed acyclic graph with a source vertex  $s$ . Write a program to compute the length of the shortest path from  $s$  to every other vertex of  $G$ .