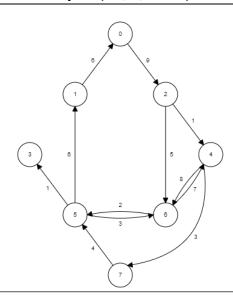
CCC2113 Data Structures and Algorithms Analysis

Name:

Lab 10: Graphs (20/6/2024)

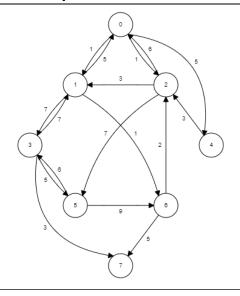
Group:



Q1: Find the shortest path from vertex 4 to all other vertices using Dijkstra's algorithm for the following graph:

Shortest path and cost

From- to	Shortest Path	Cost
4 – 0	4-7-5-1-0	19
4 – 1	4-7-5-1	13
4 – 2	4-7-5-1-0-2	28
4 – 3	4-7-5-3	8
4 – 4		0
4 – 5	4-7-5	7
4 – 6	4-6	8
4 - 7	4-7	3



Q2: Find the shortest path from vertex 0 to all other vertices using Dijkstra's algorithm for the following graph:

Shortest path and cost

From- to	Shortest Path	Cost
0 – 0		0
0 – 1	0-1	1
0 – 2	0-2	1
0 – 3	0-1-3	8
0 – 4	0-4	5
0 – 5	0-2-5	8
0 – 6	0-1-6	2
0 - 7	0-1-6-7	7