

Assignment 1

(Deadline: 23/01/2022)

Q.1 Suppose that the communication among the group of n people in a society is represented by the graph, where vertices represent the persons and the edges represent the distance (communication link distance) between two end vertices. Write a program to perform the following operations on given dataset:

- (a) Compute the complete connected graph (all persons are connected to each other)
- (b) Compute the sparse graph (every person is connected to only three members of the society).
- (c) Print the adjacent neighbors of every person in the computed graph (b).
- (d) Let us assume that the distance between every pair of nodes in the graph (b) is the same. Perform the depth first search on graph (b).