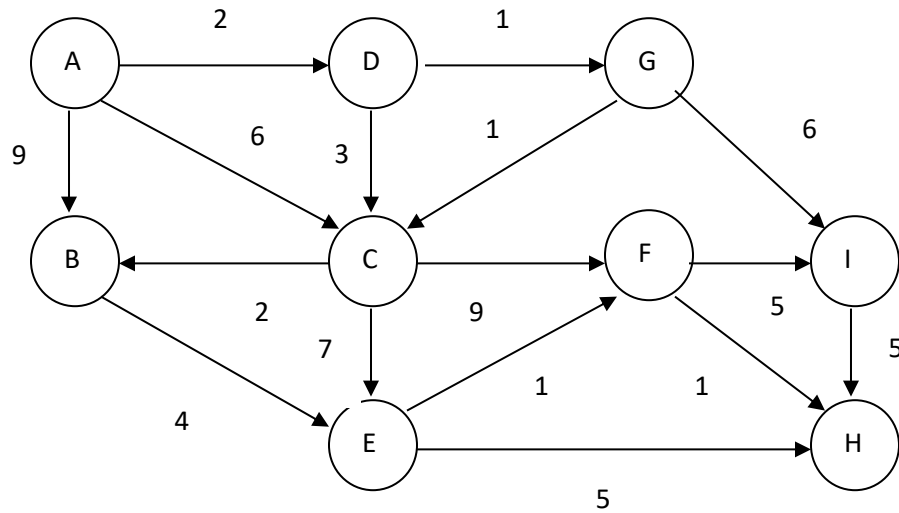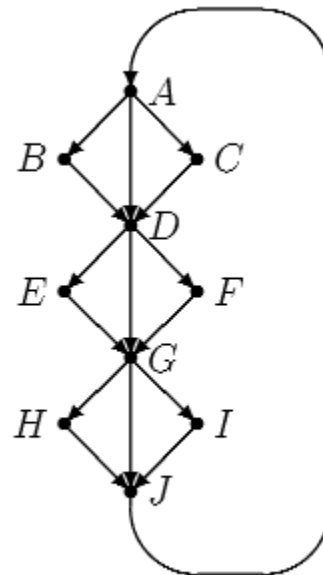# CSCI378 – Data Structures and Algorithms
Assignment 5

1. Given the Graph below use Dijkstra's algorithm to compute the shortest paths from vertex "A" to all other vertices.

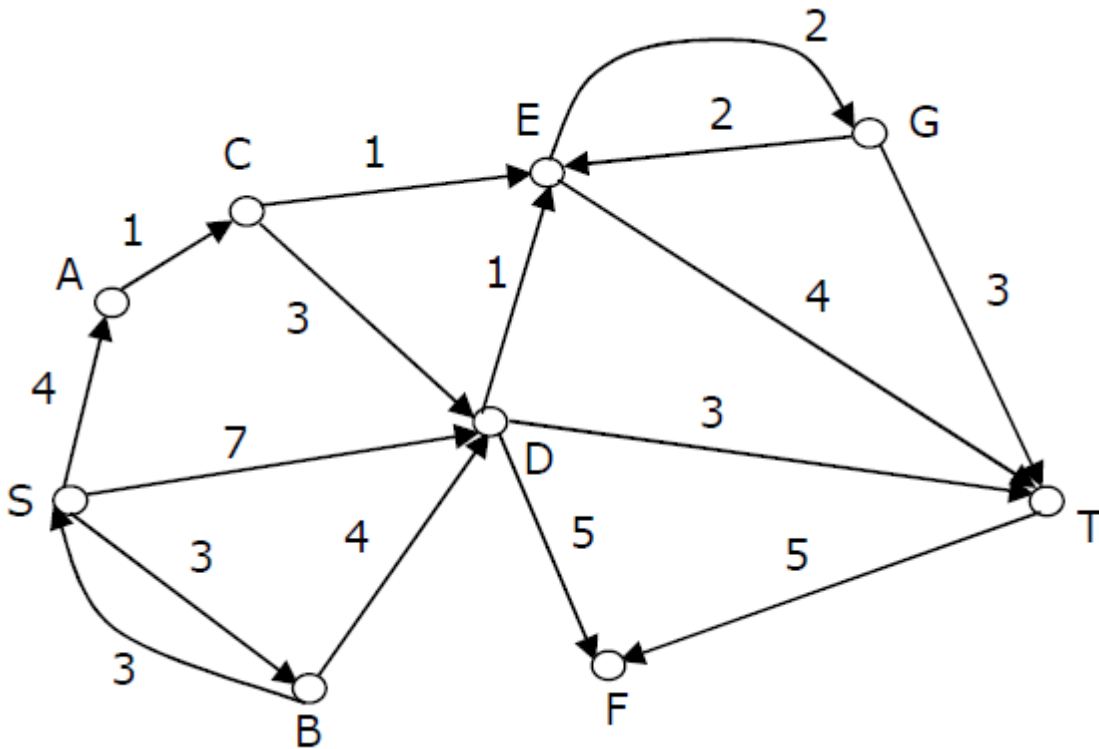
2. Consider the following directed graph.

   a. List the order of visits using DFS.

   b. List the order of visits using BFS.

3. Consider the directed graph shown in the figure below. Draw the adjacency list and the adjacency matrix.

Assignment Guidelines:

- This assignment is posted on Monday May 29th and is due on Sunday June 4th by midnight.
- **This assignment covers Chapter 5 (Graphs).**
- You have to solve all 3 problems, but only two of them will be marked. You will know the problems that will be marked after you submit the assignment.
- The assignment should be done individually not in groups. Cheating will result in a zero grade.