Design and Analysis of Algorithm
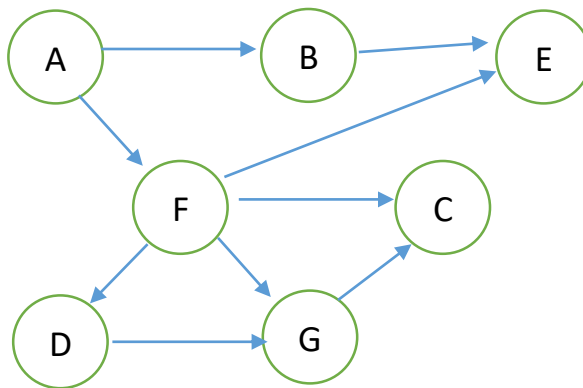
Tutorial

1. Define the following terms in Graph terminology.

    a. Weighted Digraph

    b. Multi graph

    c. Adjacent Vertex

    d. In degree and Out degree

    e. Circuit

    f. Hamiltonian Cycle

2. Refer the following graph. Consider the source vertex as A.

    a. Draw the Adjacency List representation format.

    b. Draw the Adjacency Matrix representation format.

    c. Illustrate the Breadth First Search(BFS) for the graph. Draw the graph & the queue for each step with time stamps, finally draw the breadth first tree/s.

    d. Illustrate the Depth First Search(DFS) for the graph. Draw the graph & the stack for each step with time stamps, finally draw the depth first tree/s.