

1 Graph Representation

Represent the graph with adjacency list and adjacency matrix representation.

2 Depth First Search

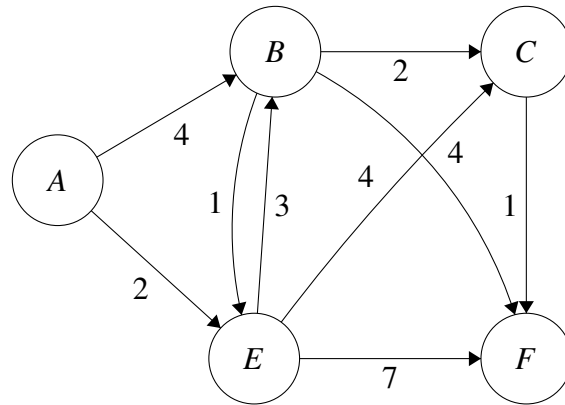
Run DFS on the same graph, starting from node A. List the order in which each node is traversed. Whenever there is a choice of which node to visit next, visit nodes in alphabetical order.

3 Breadth First Search

Run BFS on the same graph this time.

4 Dijkstra's Algorithm

Given the following graph, write down the value $\text{dist}(v)$ for all vertices V during each iteration of the Dijkstra algorithm, starting at point A .



5 Topological Sorting

Given the following graph, give a valid topological ordering of the graph. Is it unique?

