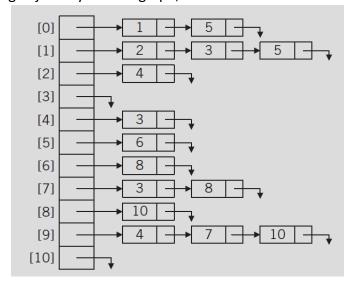
1. You are given the following adjacency list of a graph, G.

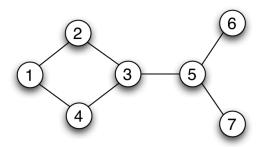


- a) what is the type of the graph? Directed/Undirected
- b) draw the graph

CS 300 Algorithms

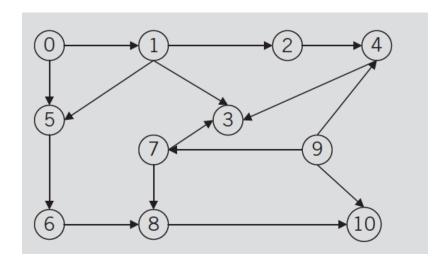
Problem Set #22: Graphs

2. You are given the following undirected graph.



- a. Please list the vertices in BFS starting at vertex 1.
- b. Please list the vertices in DFS starting at vertex 1.

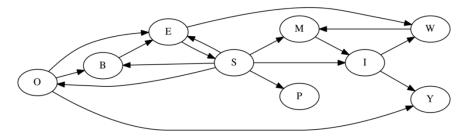
3. Consider the following graph, G.



a) What is the depth first ordering of the vertex 0.

b) What is the breadth first ordering of the vertex 0.

4. Consider the directed graph(digraph) below. Assume the adjacency lists are in sorted order. For example, follow the edge before following.



CS 300 Algorithms

Problem Set #22: Graphs

- a. Give the order in which vertices are visited using depth-first traversal. Start from vertexO.
- b. Give the order in which vertices are visited using breath-first traversal. Start from vertexO.