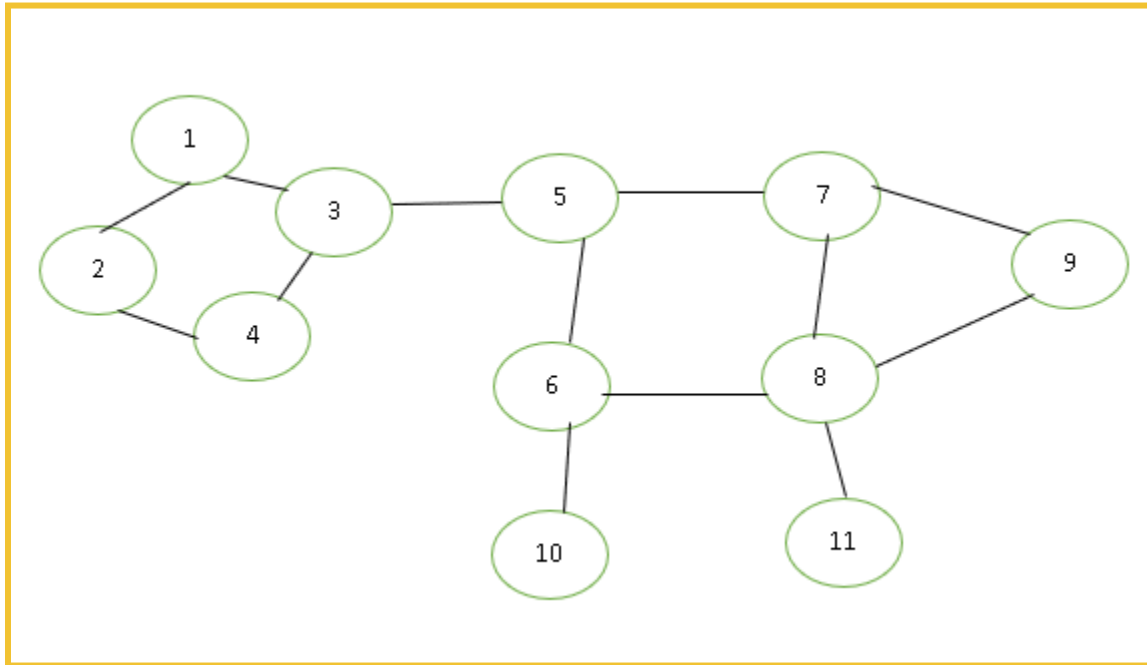


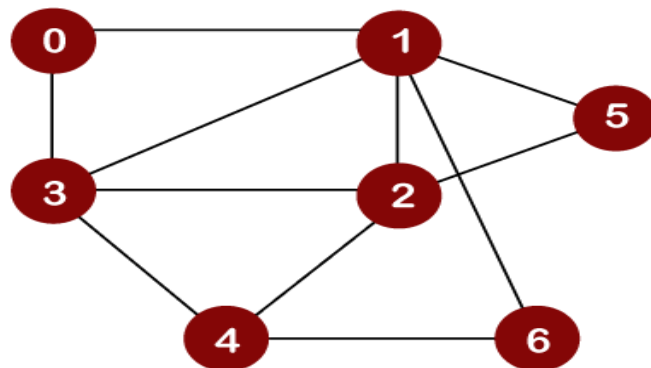
Question 1:



The picture above is an undirected graph.

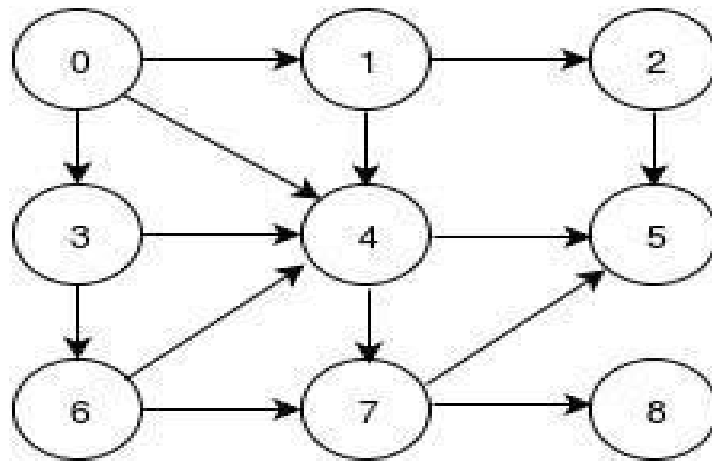
- Using the graph above, draw the BFS (Breadth First Search) spanning tree starting from vertex 1.
- Write down the time complexity of this algorithm.

Question 2:



Similar to previous task, draw the BFS spanning tree starting from Node 5.

Question 3:



The above picture is a directed graph.

- Using Depth First Search (DFS), draw the spanning tree starting from Node 0.
- From the above graph, is there any cycle present.