

## Week #9 Lab Assignments

- 1. WAP to create a binary tree using Array and perform pre-order, in-order, and post-order traversals.
- 2. Write a menu driven program to implement binary tree using linked list and different traversals.
- 3. WAP to implement non-recursive pre-order and post-order traversals using Stack data structure for binary tree.
- 4. WAP to implement level-order traversal using single Queue data structure.
- 5. Write a menu driven program to create binary tree using linked list for computing following information.
  - a) To count number of leaf nodes
  - b) To count number of non-leaf nodes
  - c) To find total number of nodes
  - d) To compute height of the binary tree
  - e) To find sum of all nodes
  - f) To find the minimum element
  - g) To find the maximum element
- 6. WAP Write the following menu driven program for the binary search tree

Binary Search Tree Menu

1. Create

- 2. In-Order Traversal
- 3. Pre-Order Traversal
- 4. Post-Order traversal
- 5. Search
- 6. Find Smallest Element
- 7. Find Largest Element
- 8. Deletion of Tree
- 9. Quit