ASSIGNMENT 5

TREES

0. Implement traversals recursively - Inorder, Preorder, PostOrder, **LevelOrder**,

1. Implement traversals iteratively - Inorder, Preorder, **PostOrder, LevelOrder**

2. Print Left/**Right/Bottom**/Top view of the Binary Tree

3. **Construct tree from inorder and preorder traversal (Easy to Medium)**

4. LCA of Binary Tree (Recursive/Iterative)

5. Diameter of Binary Tree

6. Sum of all nodes of Binary Tree (Easy)

7. Max Sum path from the leaf to leaf.

8. Mirror Tree / Identical tree (Easy)

9. Height of Binary Tree

10. Check if the tree is a (full binary tree/balanced binary tree/perfect binary tree) or not

11. Serialize/Deserialize Binary Tree

12. Connect Nodes on the same level

13. Convert each level in Binary Tree to Doubly LinkedList (Hard)

14. Reverse Level Order, Spiral Level Order, Boundary Traversal, **Vertical Traversal**

15. Construct Special Binary Tree from given Inorder traversal

16. Print root to leaf path in Binary tree

17. Print Cousins of a given Nodes in a binary tree

18. Print all nodes at K distance.

19. Find Largest Subtree sum in Binary Tree

H/W : Construct tree from inorder and postorder traversal (Easy to Medium)