BINARY TREE

COMMON/BASICS:

Size of a tree,

Count leaf nodes in a binary tree,

Maximum Depth or **Height** of a Tree,

Iterative Method to find Height of Binary Tree,

Diameter of a Binary Tree,

Write a C program to **Delete** a Tree,

Determine if Two Trees are **Identical**,

Write an Efficient C Function to Convert a Binary Tree into its **Mirror Tree**,

Maximum **width** of a binary tree,

The **Great Tree-List Recursion** Problem.

Lowest Common Ancestor (**LCA**) in a Binary Tree | Set 1,

Find **distance between two given keys** of a Binary Tree,

Find depth of the **deepest odd level leaf** node,

Deepest left leaf node in a binary tree,

Find **next right node** of a given key,

Closest leaf in a Binary Tree,

CONVERT:

Convert a given Binary Tree to Doubly Linked List | Set 1,

Convert a given Binary Tree to Doubly Linked List | Set 2,

Convert a given Binary Tree to Doubly Linked List | Set 3

Convert a Binary Tree **to Threaded binary tree**,

Convert left-right representation of a binary tree to **down-right**,

Construct Complete Binary Tree from its Linked List Representation,

Connect nodes at same level,

Connect nodes at same level using constant extra space,

CHECK:

Check if a binary tree **is subtree** of another binary tree,

Check whether a given Binary Tree **is Complete** or not,

Check if **all leaves are at same level**,

Check if a given Binary Tree **is height balanced** like a Red-Black Tree,

How to determine if a binary tree is height-balanced?

Check if two nodes **are cousins** in a Binary Tree,

Check if a binary tree **is subtree** of another binary tree | Set 2,

SUM:

Check for **Children Sum Property** in a Binary Tree.,

Convert an arbitrary Binary Tree to a tree that holds Children Sum Property,

Check if a given Binary Tree **is SumTree**,

Convert a given tree to its Sum Tree,

Find the **maximum sum leaf to root path** in a Binary Tree,

Find the maximum path sum between two leaves of a binary tree,

Root to leaf path sum equal to a given number,

Vertical Sum in a given Binary Tree,

Difference between sums of odd level and even level nodes of a Binary Tree,

Remove all nodes which don't lie in any path with sum>= k,

Sum of all the numbers that are formed from root to leaf paths,

VIEWS:

Print **Left View** of a Binary Tree,

Print Nodes in **Top View** of Binary Tree,

Bottom View of a Binary Tree,

PRINT:

Given a binary tree, print out all of its root-to-leaf paths one per line.

Print nodes **at k distance from root**,

Print all nodes at **distance k from a given node**,

Print all nodes that are at **distance k from a leaf node**,

Get **Level of a node** in a Binary Tree,

Print **Ancestors** of a given node in Binary Tree,

Print ancestors of a given binary tree node *without recursion*,

Print a Binary Tree in Vertical Order | Set 1,

Print nodes between two given level numbers of a binary tree,

TRAVERSALS:

If you are given two traversal sequences, can you construct the binary tree?

Level Order Tree Traversal,

Print level order traversal line by line,

Level order traversal in **spiral form**,

Reverse Level Order Traversal,

Boundary Traversal of binary tree,

Inorder Tree Traversal without Recursion,

Inorder Tree Traversal without recursion and without stack!

Iterative Postorder Traversal | Set 1 (Using Two Stacks),

Iterative Postorder Traversal | Set 2 (Using One Stack),

Iterative Preorder Traversal,

Morris traversal for Preorder,

Construct Tree from given Inorder and Preorder traversals,

Construct a tree from Inorder and Level order traversals,

Construct Full Binary Tree from given preorder and postorder traversals,

Construct Special Binary Tree from given Inorder traversal,

Construct Special tree from given preorder traversal,

Print Postorder traversal from given Inorder and Preorder traversals,

Perfect Binary Tree Specific Level Order Traversal,

MISC:

Threaded Binary Tree,

Double Tree,

Foldable Binary Trees,

Segment Tree | Set 1 (Sum of given range),

Tree Isomorphism Problem,

Custom Tree Problem,

Ternary Search Tree,

Largest Independent Set Problem,

Serialize and Deserialize a Binary Tree,

Extract Leaves of a Binary Tree in a Doubly Linked List,

Find all possible interpretations of an array of digits,

Reverse alternate levels of a perfect binary tree,

Minimum no. of iterations to pass information to all nodes in the tree,

Clone a Binary Tree with Random Pointers,

Populate Inorder Successor for all nodes,

Linked complete binary tree & its creation,