

### **Assignment 12**

1. Write a C program to implement a simple tree structure and perform insertion & Deletion of nodes.
2. Write a C program to find the height of a tree.
3. Write a C program to implement a function that checks whether a given tree is symmetric.
4. Write a C program to perform a pre-order/in-order/post-order/level-order traversal of a binary tree.
5. Write a C program to count the total number of internal(non-leaf) and leaf Node in a binary tree.
6. Write a C program to check if two binary trees are identical.
7. Write a C program to implement mirror conversion of a binary tree.
8. Write a C program to create a binary search tree and insert/delete nodes into it.
9. Write a C program to search for a given value in a binary search tree.
10. Write a C program to find the minimum and maximum values in a binary search tree.
11. Write a C program to check if a binary tree is a binary search tree (BST).
12. Write a C program to print all elements of a BST within a given range.
13. Write a C program to find the k-th smallest element in a BST.