

### **Assignment on Binary Tree:**

1. Write a program that takes as input the root of a binary tree and checks whether the tree is height-balanced.
2. Write a program that checks whether a binary tree is symmetric.
3. Design an algorithm to compute the sum of the binary numbers represented by the root-to-leaf paths.
4. Write a program which takes as input an integer and a binary tree with integer node weights, and checks if there exists a leaf whose path weight equals the given integer.
5. Write a program which takes as input a binary tree and performs an inorder traversal of the tree. Do not use recursion.