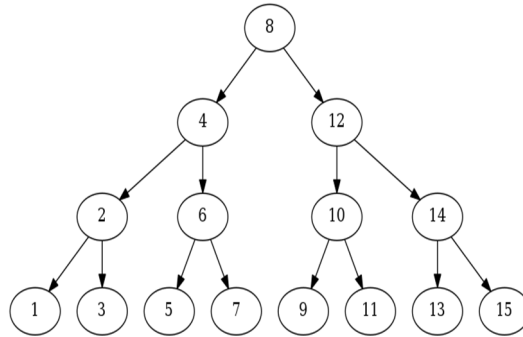# Lab 11

Problem Description:

   Given a Binary Search Tree, write a function to check whether the given Binary Tree is a prefect Binary Tree or not. A Binary tree is Perfect Binary Tree in which all internal nodes have two children and all leaves are at same level.

Input: The first line of input n indicates the number of nodes in the binary tree. The second line of input contains those n nodes separated by a single space.

Output: The output consists of only one line containing word "YES" or "NO". It will indicate whether the input binary search tree is a perfect tree or not.

Test Case	Input	Output
1	15 8 4 12 2 6 10 14 1 3 5 7 9 11 13 15	YES
2	16 8 4 12 2 6 10 14 1 3 5 7 9 11 13 15 16	NO