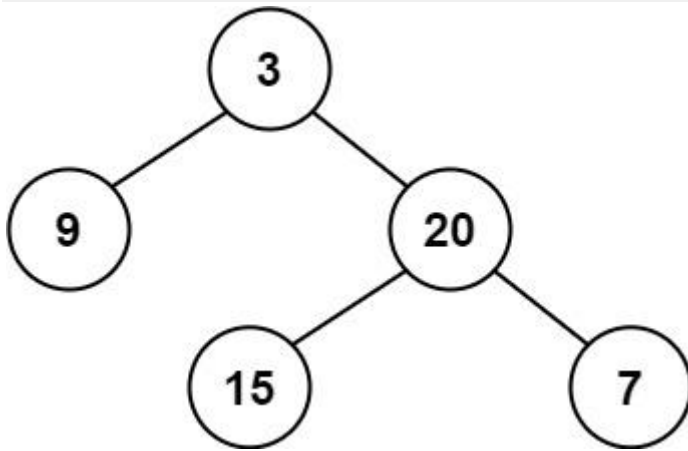


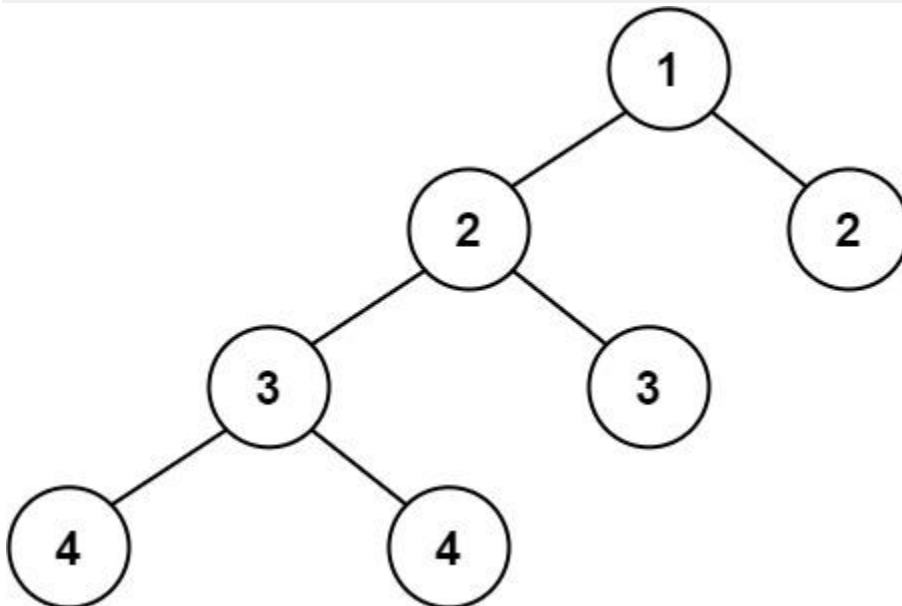
Given a binary tree, determine if it is height-balanced.

Example 1:



Input: root = [3,9,20,null,null,15,7] Output: true

Example 2:



Input: root = [1,2,2,3,3,null,null,4,4] Output: false

Example 3:

Input: root = [] Output: true

Constraints:

- The number of nodes in the tree is in the range [0, 5000].

- `-104 <= Node.val <= 104`

Solution:

```
class Solution {  
  
    public int checkHeight(TreeNode root, int[] arr) {  
  
        if (root == null) return 0;  
  
        int leftHeight = checkHeight(root.left, arr);  
        int rightHeight = checkHeight(root.right, arr);  
  
        if (Math.abs(leftHeight - rightHeight) > 1) {  
            arr[0] = 1;  
        }  
  
        return 1 + Math.max(leftHeight, rightHeight);  
    }  
  
    public boolean isBalanced(TreeNode root) {  
        int[] arr = new int[1];  
        checkHeight(root, arr);  
        return arr[0] == 0;  
    }  
}
```