

100. Same Tree

Easy



9.4K

187

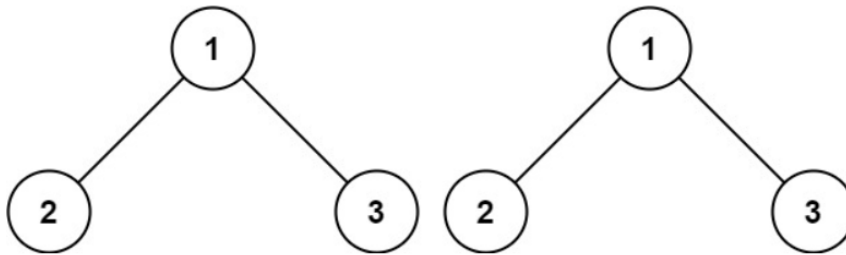


Companies

Given the roots of two binary trees p and q , write a function to check if they are the same or not.

Two binary trees are considered the same if they are structurally identical, and the nodes have the same value.

Example 1:

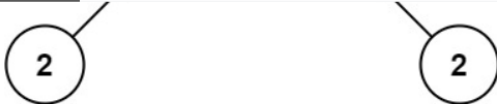


Input: $p = [1,2,3]$, $q = [1,2,3]$
Output: true

Example 2:

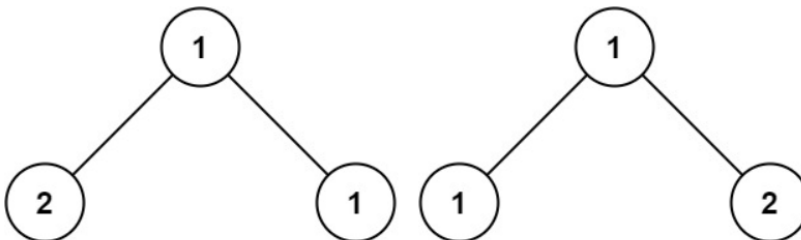


Description Editorial Solutions (8.3K) Submissions



Input: $p = [1,2]$, $q = [1,null,2]$
Output: false

Example 3:



Input: $p = [1,2,1]$, $q = [1,1,2]$
Output: false

Constraints:

- The number of nodes in both trees is in the range $[0, 100]$.
- $-10^4 \leq \text{Node.val} \leq 10^4$

EmiLabarthe
May 30, 2023 10:21

Details

+ Solution

Java

Sorry, there are not enough accepted submissions to show data

Runtime 0 ms

Beats 100%

Memory 39.8 MB

Beats 88.55%

Click the distribution chart to view more details

```
/**
 * Definition for a binary tree node.
 * public class TreeNode {
 *     int val;
 *     TreeNode left;
 *     TreeNode right;
 *     TreeNode() {}
 *     TreeNode(int val) { this.val = val; }
 *     TreeNode(int val, TreeNode left, TreeNode right) {
 *         this.val = val;
 *         this.left = left;
 *         this.right = right;
 *     }
 * }
 */

class Solution {
    public boolean isSameTree(TreeNode p, TreeNode q) {
        boolean bool;
        if(p != null && q != null){
            if(p.val == q.val){
                if(p.left != null && q.left != null){
                    if(isSameTree(p.left, q.left) == false){
                        return false;
                    }
                }
                if(p.right != null && q.right != null){
                    if(isSameTree(p.right, q.right) == false){
                        return false;
                    }
                }
                if(p.left != null ^ q.left != null){
                    return false;
                }
                if(p.right != null ^ q.right != null){
                    return false;
                }
            }
            if(p.val != q.val){
                return false;
            }
            return true;
        }
        if(p == null && q == null){
            return true;
        }
        return false;
    }
}
```