

814. Binary Tree Pruning

Medium

1923

61


Add to List

Share

Given the `root` of a binary tree, return *the same tree where every subtree (of the given tree) not containing a 1 has been removed*.

A subtree of a node `node` is `node` plus every node that is a descendant of `node`.

Example 1:



Input: root = [1,null,0,0,1]


Output: [1,null,0,null,1]

Explanation:

Only the red nodes satisfy the property "every subtree not containing a 1".

The diagram on the right represents the answer.

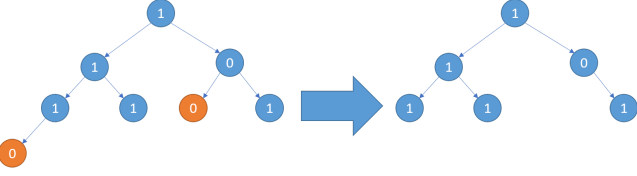
Example 2:



Input: root = [1,0,1,0,0,0,1]

Output: [1,null,1,null,1]

Example 3:



Input: root = [1,1,0,1,1,0,1,0]

Output: [1,1,0,1,1,null,1]

- Constraints:
- The number of nodes in the tree is in the range `[1, 200]`.
 - `Node.val` is either `0` or `1`.

Accepted 117,391

Submissions 164,507

Seen this question in a real interview before?

Yes

No

Companies

Related Topics

```
1  /**
2   * Definition for a binary tree node.
3   * public class TreeNode {
4   *     int val;
5   *     TreeNode left;
6   *     TreeNode right;
7   *     TreeNode() {}
8   *     TreeNode(int val) { this.val = val; }
9   *     TreeNode(int val, TreeNode left, TreeNode right) {
10  *         this.val = val;
11  *         this.left = left;
12  *         this.right = right;
13  *     }
14  * }
15  */
16  class Solution {
17  *     public TreeNode pruneTree(TreeNode root) {
18  *
19  *     }
20  }
```