

814. Binary Tree Pruning

Description

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*.

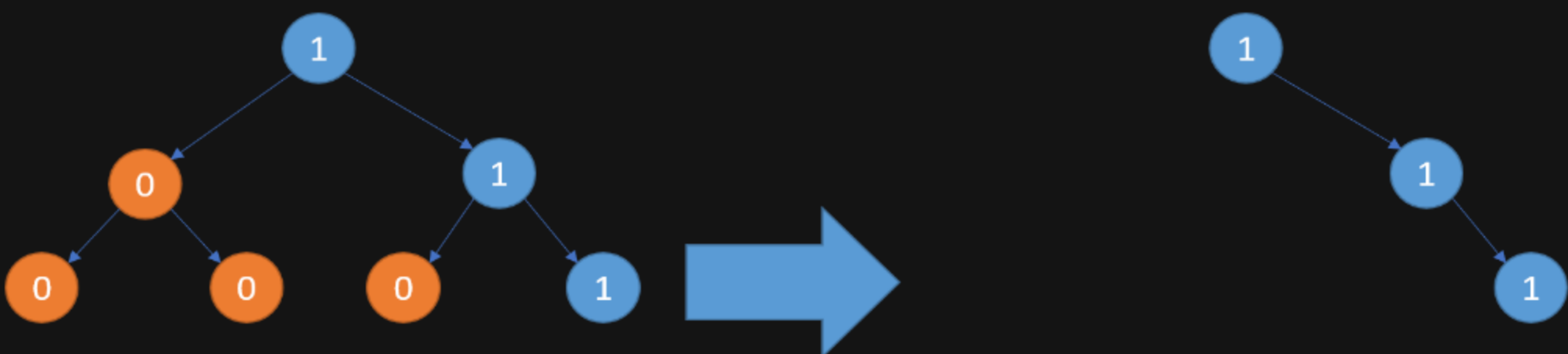
A subtree of a node `node` is `node` plus every node that is a descendant of `node`.

Example 1:



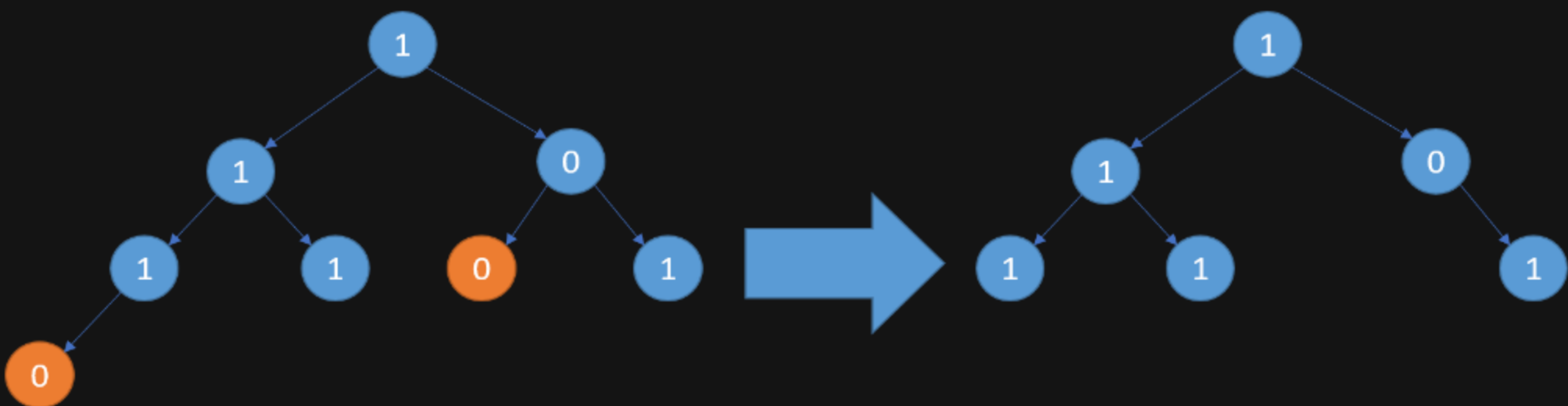
Input: `root = [1,null,0,0,1]`
Output: `[1,null,0,null,1]`
Explanation:
Only the red nodes satisfy the property "every subtree not containing a 1".
The diagram on the right represents the answer.

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`.

