

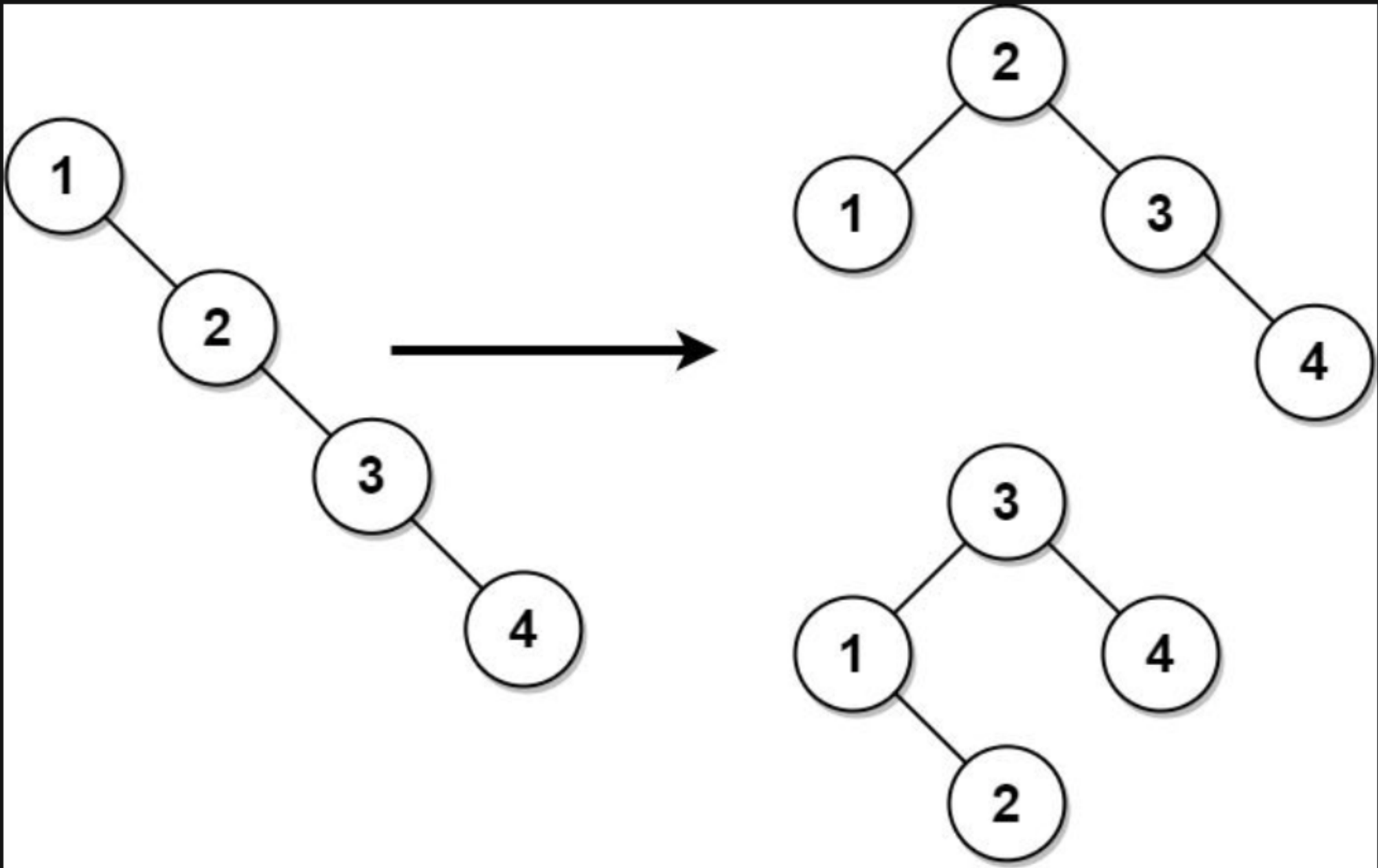
1382. Balance a Binary Search Tree

Description

Given the `root` of a binary search tree, return *a **balanced** binary search tree with the same node values*. If there is more than one answer, return **any** of them.

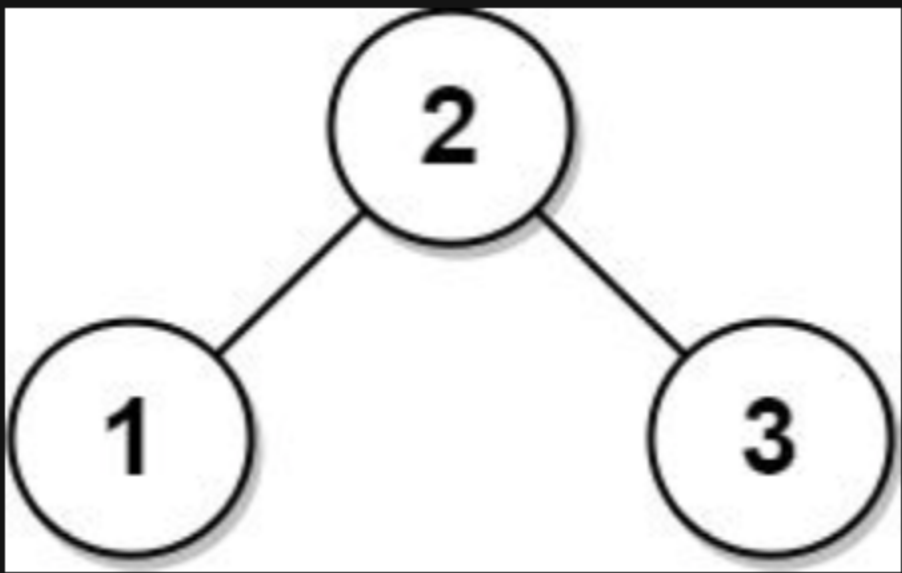
A binary search tree is **balanced** if the depth of the two subtrees of every node never differs by more than `1`.

Example 1:



Input: `root = [1,null,2,null,3,null,4,null,null]`
Output: `[2,1,3,null,null,null,4]`
Explanation: This is not the only correct answer, `[3,1,4,null,2]` is also correct.

Example 2:



Input: `root = [2,1,3]`
Output: `[2,1,3]`

Constraints:

- The number of nodes in the tree is in the range `[1, 104]`.
- `1 <= Node.val <= 105`

