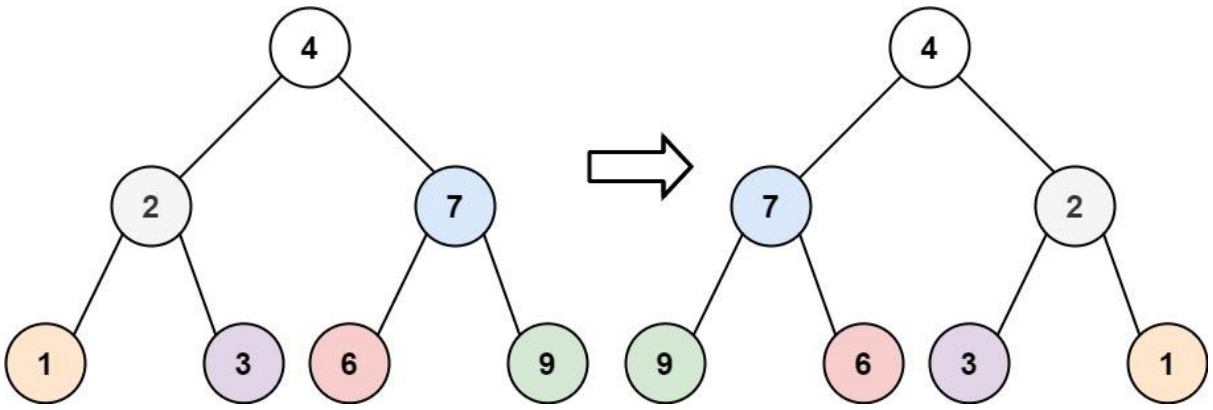
226. Invert Binary Tree

Given the root of a binary tree, invert the tree, and return *its root*.

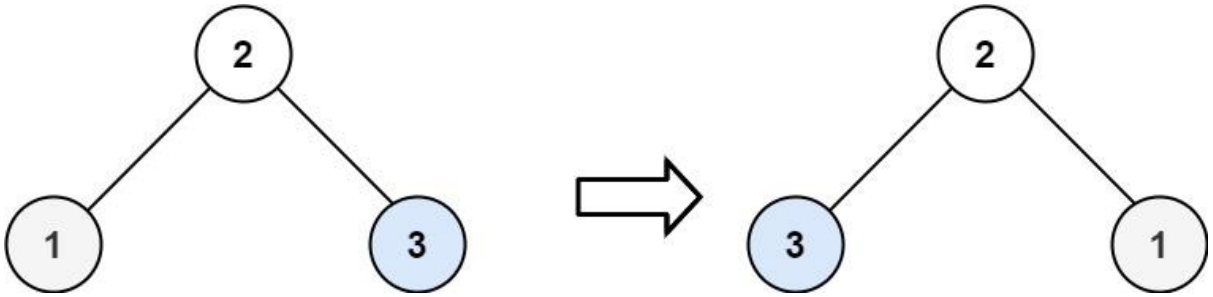
Example 1:



Input: root = [4,2,7,1,3,6,9]

Output: [4,7,2,9,6,3,1]

Example 2:



Input: root = [2,1,3]

Output: [2,3,1]

Example 3:

Input: root = []

Output: []

Constraints:

- The number of nodes in the tree is in the range [0, 100].
- -100 <= Node.val <= 100

```
# Definition for a binary tree node.
# class TreeNode(object):
#     def __init__(self, val=0, left=None, right=None):
#         self.val = val
#         self.left = left
#         self.right = right
class Solution(object):
    def invertTree(self, root):
        """
        :type root: TreeNode
        :rtype: TreeNode
        """
        if not root:
            return root

        self.invertTree(root.left)
        self.invertTree(root.right)

        root.left ,root.right = root.right, root.left
        return root
```