Given the root of a binary tree, flatten the tree into a "linked list":

* The "linked list" should use the same TreeNode class where the right child pointer points to the next node in the list and the left child pointer is always null.
* The "linked list" should be in the same order as a [**pre-order traversal**](https://en.wikipedia.org/wiki/Tree_traversal#Pre-order,_NLR) of the binary tree.

**Example 1:**

**Input:** root = [1,2,5,3,4,null,6]

**Output:** [1,null,2,null,3,null,4,null,5,null,6]

**Example 2:**

**Input:** root = []

**Output:** []

**Example 3:**

**Input:** root = [0]

**Output:** [0]

**Solution:**

/\*\*

\* 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 void flatten(TreeNode root) {

if(root == null) return;

while(root != null){

if(root.left != null){

TreeNode left = root.left;

TreeNode current = left;

while(current.right != null)

current = current.right;

current.right = root.right; //main step

root.left = null;

root.right = left;

}

root = root.right;

}

}

}

https://www.youtube.com/watch?v=NOKVBiJwkD0