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/**
 * Definition for a binary tree node.
 * public class TreeNode {
 *     int val;
 *     TreeNode left;
 *     TreeNode right;
 *     TreeNode(int x) { val = x; }
 * }
 */
class Solution {
    public void flatten(TreeNode root) {
        if (root == null)
            return;
        Stack<TreeNode> s = new Stack<>();
        s.push(root);
        while (!s.isEmpty()) {
            TreeNode node = s.pop();
            if (node.right != null) {
                s.push(node.right);
            }
            if (node.left != null) {
                s.push(node.left);
            }
            if (!s.isEmpty()) {
                node.right = s.peek();
            }
            node.left = null;
        }
    }
}
```