114. Flatten Binary Tree to Linked List ★

Question | Editorial Solution

My Submissions (/problems/flatten-binary-tree-to-linked-list/submissions/)

Total Accepted: **98631** Total Submissions: **301737** Difficulty: **Medium**

Notes

Given a binary tree, flatten it to a linked list in-place.

For example,

Given

```
        1
       / \
      2   5
     / \   \
    3   4   6
```

The flattened tree should look like:

```
1
 \
  2
   \
    3
     \
      4
       \
        5
         \
          6
```

click to show hints.

Subscribe (/subscribe/) to see which companies asked this question

Show Tags

Have you met this question in a real interview? Yes No

Discuss (https://leetcode.com/discuss/questions/oj/flatten-binary-tree-to-linked-list)

Pick One (/problems/random-one-question/)

C++ </>

```
1  /**
2   * Definition for a binary tree node.
3   * struct TreeNode {
```

Send Feedback (mailto:admin@leetcode.com?subject=Feedback)

```
 4   *     int val;
 5   *     TreeNode *left;
 6   *     TreeNode *right;
 7   *     TreeNode(int x) : val(x), left(NULL), right(NULL) {}
 8   * };
 9   */
10  class Solution {
11  public:
12      void flatten(TreeNode* root) {
13          if (!root) return;
14          flatten(root->right);
15          flatten(root->left);
16          TreeNode *left = root->left, *right = root->right;
17          if (left) {
18              root->right = left;
19              while (left->right) {
20                  left = left->right;
21              }
22              left->right = right;
23          }
24          else {
25              root->right = right;
26          }
27          root->left = nullptr;
28      }
29  };
```

Notes

Custom Testcase

Run Code | Submit Solution