226. Invert Binary Tree ★

Question | Editorial Solution | My Submissions (/problems/invert-binary-tree/submissions/)

Total Accepted: **130053** Total Submissions: **266287** Difficulty: **Easy** Contributors: **Admin**

Invert a binary tree.

```
     4
   /   \
  2     7
 / \   / \
1   3 6   9
```

Notes

to

```
     4
   /   \
  7     2
 / \   / \
9   6 3   1
```

Trivia:

This problem was inspired by this original tweet (https://twitter.com/mxcl/status/608682016205344768) by Max Howell (https://twitter.com/mxcl):

> Google: 90% of our engineers use the software you wrote (Homebrew), but you can't invert a binary tree on a whiteboard so fuck off.

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/invert-binary-tree) Pick One (/problems/random-one-question/)

C++

```cpp
/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     TreeNode *left;
 *     TreeNode *right;
 *     TreeNode(int x) : val(x), left(NULL), right(NULL) {}
 * };
 */
class Solution {
public:
    TreeNode* invertTree(TreeNode* root) {
        if(root){
            invertTree(root->left);
            invertTree(root->right);
            swap(root->left, root->right);
        }
        return root;
    }
};
```

Custom Testcase

[1,2,3,4,5,6,7,8,9,10,11]

One line for one parameter. Hint

Run Code Submit Solution

Run Code Status: Finished

Run Code Result:

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

Your input

```
[1,2,3,4,5,6,7,8,9,10,11]
```

Your answer

```
[1,3,2,7,6,5,4,null,null,null,null,11,10,9,8]
```

Expected answer

```
[1,3,2,7,6,5,4,null,null,null,null,11,10,9,8]
```

Show Diff

Runtime: 0 ms

Note: is Run Code inconsistent with Submit Solution? If you are using global variables or C/C++, check this (/faq/#different-output) out.

Notes

Submission Result: Accepted (/submissions/detail/79996954/) More Details > (/submissions/detail/79996954/)

Next challenges: (E) Maximum Depth of Binary Tree (/problems/maximum-depth-of-binary-tree) (E) Binary Tree Paths (/problems/binary-tree-paths) (M) Largest BST Subtree (/problems/largest-bst-subtree)

Share your acceptance!

751 150

Congratulations, you've just *unlocked* a solution! Reveal Solution > (/articles/invert-binary-tree/)