

94. Binary Tree Inorder Traversal ★

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Total Accepted: **151249** Total Submissions: **358335** Difficulty: **Medium**

[Notes](#)

Given a binary tree, return the *inorder* traversal of its nodes' values.

For example:

Given binary tree [1,null,2,3] ,

```
  1
   \
    2
   /
  3
```

return [1,3,2] .

Note: Recursive solution is trivial, could you do it iteratively?

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C++



```
1  /**
2   * Definition for a binary tree node.
3   * struct TreeNode {
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     vector<int> inorderTraversal(TreeNode* root) {
13         // Send Feedback (mailto:admin@leetcode.com?subject=Feedback)
14         vector<int> visit;
```

```
15     std::stack<TreeNode*> stack;
16     while (!stack.empty() || now != nullptr) {
17         if (now != nullptr) {
18             stack.push(now);
19             now = now->left;
20         }
21         else {
22             now = stack.top();
23             stack.pop();
24             visit.push_back(now->val);
25             now = now->right;
26         }
27     }
28     return visit;
29 }
30 };
```

 Notes

Custom Testcase ☐

Run Code

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