94. Binary Tree Inorder Traversal

Description | Hints | Submissions | Discuss | Solution

Pick One

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

Example:

```
Input: [1,null,2,3]
   1
    \
     2
    /
   3

Output: [1,3,2]
```

```java
public class L94 {

    public class TreeNode{
        int val;
        TreeNode left;
        TreeNode right;
        public TreeNode(int x) {
            val = x;
        }
    }
    /*
     * 这道题目是中序遍历二叉树，利用循环的方式，还可以利用递归的方式。
     */
      public List<Integer> inorderTraversal(TreeNode root) {
          List<Integer> list = new ArrayList<Integer>();
          Stack<TreeNode> stack = new Stack<>();

          TreeNode curNode = root;

          while (!stack.isEmpty() || curNode != null) {
            while(curNode != null) {
                stack.push(curNode);
                curNode = curNode.left;
            }
            if(!stack.isEmpty()) {
                curNode = stack.pop();
                list.add(curNode.val);
                curNode = curNode.right;
            }
        }
          return list;
      }
}
```