1. Binary Tree Inorder Traversal

Medium

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]

**Solution**

递归写法没问题。注意非递归写法，设置一个工作指针

/\*\*  
 \* Definition for a binary tree node.  
 \* struct TreeNode {  
 \* int val;  
 \* TreeNode \*left;  
 \* TreeNode \*right;  
 \* TreeNode(int x) : val(x), left(NULL), right(NULL) {}  
 \* };  
 \*/  
typedef TreeNode\* pnode;  
class Solution {  
public:  
 vector<int> inorderTraversal(TreeNode\* root) {  
 stack<pnode>s;  
 vector<int>path;  
 pnode cur = root;  
 while(cur != NULL || !s.empty()){  
 while(cur != NULL){  
 s.push(cur);  
 cur = cur->left;  
 }  
 if(!s.empty()){  
 cur = s.top();  
 s.pop();  
 path.push\_back(cur->val);  
 cur = cur->right;  
 }  
 }  
 return path;  
 }  
};