

230. Kth Smallest Element in a BST

题目描述: <https://leetcode.com/problems/kth-smallest-element-in-a-bst/>

给定一个BST，求第K小的数的值。

解题思路：

迭代着找，先按顺序把值存好，然后pop k次。

代码：

```
/**
 * 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:
    int kthSmallest(TreeNode* root, int k) {
        stack <TreeNode*> s;
        TreeNode *p = root;
        while(p || !s.empty()){
            while(p){
                s.push(p);
                p = p->left;
            }
            p = s.top();
            if(--k == 0){
                return p->val;
            }
            s.pop();
            p = p->right;
        }
        return root->val;
    }
};
```

