

150. Evaluate Reverse Polish Notation150. Evaluate Reverse Polish Notation

题目描述: <https://leetcode.com/problems/evaluate-reverse-polish-notation/>

给定一个算式的后续表达式，求结果。

例如：

```
[ "2", "1", "+", "3", "*" ] -> ((2 + 1) * 3) -> 9  
[ "4", "13", "5", "/", "+" ] -> (4 + (13 / 5)) -> 6
```

解题思路：

边入栈边计算，每当遇到标点符号就弹出两个算数计算，然后把结果push回去

代码：

```
class Solution {
public:
    int evalRPN(vector<string>& tokens) {
        stack<int> st;
        for(int i = 0; i < tokens.size(); i++) {
            if(tokens[i] == "+") {
                int a = st.top(); st.pop();
                int b = st.top(); st.pop();
                int c = b + a;
                st.push(c);
            }
            else if(tokens[i] == "-") {
                int a = st.top(); st.pop();
                int b = st.top(); st.pop();
                int c = b - a;
                st.push(c);
            }
            else if(tokens[i] == "*") {
                int a = st.top(); st.pop();
                int b = st.top(); st.pop();
                int c = b * a;
                st.push(c);
            }
            else if(tokens[i] == "/") {
                int a = st.top(); st.pop();
                int b = st.top(); st.pop();
                int c = b / a;
                st.push(c);
            }
            else {
                st.push(atoi(tokens[i].c_str()));
            }
        }
        return st.top();
    }
};
```