

最小栈

设计一个支持 push , pop , top 操作，并能在常数时间内检索到最小元素的栈。

- push(x) —— 将元素 x 推入栈中。
- pop() —— 删除栈顶的元素。
- top() —— 获取栈顶元素。
- getMin() —— 检索栈中的最小元素。

示例:

输入:

```
["MinStack","push","push","push","getMin","pop","top","getMin"]
```

```
[[],[-2],[0],[-3],[],[],[],[[]]
```

输出:

```
[null,null,null,null,-3,null,0,-2]
```

解释:

```
MinStack minStack = new MinStack();
```

```
minStack.push(-2);
```

```
minStack.push(0);
```

```
minStack.push(-3);
```

```
minStack.getMin(); --> 返回 -3.
```

```
minStack.pop();
```

```
minStack.top(); --> 返回 0.
```

```
minStack.getMin(); --> 返回 -2.
```

```
class MinStack {
public:
    stack<int> A;
    stack<int> B;
    /** initialize your data structure here. */
```

```

MinStack() {

}

void push(int val) {
    A.push(val);
    if(B.empty() || val<=B.top())//小栈为空或小于等于栈顶元素
    {
        B.push(val);
    }
}

void pop() {
    if(A.top()==B.top())
    {
        B.pop();//相等情况 更新小栈栈顶
    }
    A.pop();
}

int top() {
    return A.top();
}

int getMin() {
    return B.top();
}
};

/**
 * Your MinStack object will be instantiated and called as such:
 * MinStack* obj = new MinStack();
 * obj->push(val);
 * obj->pop();
 * int param_3 = obj->top();
 * int param_4 = obj->getMin();
 */

```