

LeetCode

Day-11 Q-04: Min Stack

Design a stack that supports push, pop, top, and retrieving the minimum element in constant time.

- push(x) -- Push element x onto stack.
- pop() -- Removes the element on top of the stack.
- top() -- Get the top element.
- getMin() -- Retrieve the minimum element in the stack.

Example 1:

Input

```
["MinStack","push","push","push","getMin","pop","top","getMin"]  
[[],[-2],[0],[-3],[],[],[],[ ]]
```

Output

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

Explanation

```
MinStack minStack = new MinStack();  
minStack.push(-2);  
minStack.push(0);  
minStack.push(-3);  
minStack.getMin(); // return -3  
minStack.pop();  
minStack.top();    // return 0  
minStack.getMin(); // return -2
```

Constraints:

- Methods `pop`, `top` and `getMin` operations will always be called on **non-empty** stacks.

