Description | My Submissions | Hints/Editorial | AC Submissions | My Notes (0)

Min Stack

? Ask Doubt

Time-Limit: 1 sec Score: 0.00/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100 Relevant For: AZ-201

Description

Implement a stack that supports the following operations.

1. push *x* -- Push element *x* onto stack.
2. pop -- Remove the element on top of the stack, if the stack is non-empty. Otherwise do nothing.
3. top -- Print the top element, if the stack is non-empty. Otherwise, print -1.
4. getMin -- Print the minimum element in the stack, if the stack is non-empty. Otherwise, print -1.

Initially, the stack is empty.

Input Format

The first line of input contains Q - the number of queries.
Each of next line contains input in one of the four formats mentioned in the problem statement.

Output Format

Print the answer for the *top* and *getMin* operations.

Constraints

$1 \le Q \le 10^6$
$0 \le x \le 10^9$

Sample Input 1

Copy

```
11
push 1
push 3
top
getMin
pop
top
getMin
pop
pop
top
getMin
```

Sample Output 1

Copy

C++14[GCC]

Submit

```
#include<bits/stdc++.h>
using namespace std;

class MinStack {
```