09/05/2024, 19:26 Stack Increments

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Stack Increments

? Ask Doubt

Time-Limit: 1 sec Score: 0/100 Difficulty: ★★★

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

Description

You have a box and you want to put numbers into it.

The capacity of the box is \mathbf{n} . If the box has \mathbf{n} numbers, no more numbers can be added to it. Implement the **CustomStack** class :

- 1. **CustomStack(int n):** Initialises the object with n which is the maximum capacity of the box.
- 2. **void push(int x)** ($1 \le x \le 1000$) Add x to the top of the box. If the box has already reached its capacity, do nothing.
- 3. int pop() Return the number present on top of the box. Return -1 if the box is empty.
- 4. **void inc(int k, int val) -** $(1 \le k \le 10^4, 0 \le val \le 1000)$ Increment the bottom **k** numbers of the box by **val**. If there are less than **k** numbers in the box, just increment all the numbers.

Input Format

Your CustomStack object will be instantiated and called as such:

```
CustomStack* obj = new CustomStack(maxSize);
obj->push(x);
int param_2 = obj->pop();
obj->inc(k,val);
```

Output Format

Implement the CustomStack class.

Constraints

```
1 \le n \le 100000

1 \le q \le 100000 (total number of function calls)

1 \le x \le 1000

1 \le k \le 105

0 \le val \le 1000
```

Sample Input 1

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```
4 12
push 5
push 9
push 8
```

<u>C++14[GCC]</u> ▼

```
Submit

1 * #include <bits/stdc++.h>
2 using namespace std;
3
4
```