



03 : 17 : 03 : 26
DAY HRS MIN SEC

January Circuits '17

LIVE

Jan 20, 2017, 09:00 PM IST - Jan 28, 2017, 09:00 PM IST

5
LIVE EVENTS

INSTRUCTIONS

PROBLEMS

SUBMISSIONS

LEADERBOARD

ANALYTICS

JUDGE

← Problems / Convoluted Operations

Convoluted Operations

Max. Marks: 100

Mishki is quite interested in playing games, and recently she found an empty [stack](#). Now she wants to perform 3 types of operations on the stack:

- 1) 1 A : push element A in the stack.
- 2) 0 : pop one element from stack.
- 3) 2 $K X$: find how many elements were less than X present in the stack, after performing K^{th} operation on the stack.

Can you help her in performing the above operations ?

Input:

The first line contains an integer N , denoting the number of operations.

Next N line contains, any of the 3 types of operations mentioned above, where i^{th} line contains the i^{th} operation.

Output

Print the required answer for each of the 3rd type of operation, in new line.

Constraints:

$$1 \leq N \leq 5 \times 10^5$$

$$0 \leq A, X \leq 10^9$$

$$1 \leq K \leq N$$

Notes:

- 1) No pop operation will be given for an empty stack.
- 2) Let's say, you are performing i^{th} operation on the stack and it is of 3rd type, then the given K will always be less than i .
- 3) There will be at least one 3rd type of operation, in the input.

SAMPLE INPUT



```

7
1 9
1 1
2 2 10
1 2
2 4 5
0
2 6 5

```

SAMPLE OUTPUT



```

2
2
1

```

Explanation

Initially

Operation 1

9

Operation 2

9

1

In 3rd operation you need to find the values present in the stack which were less than 10 , after performing 2nd operation. So the answer is 2.

Operation 4

9

1

2

In 5th operation you need to find the values present in the stack which were less than 5 , after performing 4th operation. So the answer is 2.

Operation 6

9	1
---	---

In 7th operation you need to find the values present in the stack which were less than 5 , after performing 6th operation. So the answer is 1.

Time Limit: 1.0 sec(s) for each input file.

Memory Limit: 256 MB

Source Limit: 1024 KB

Marking Scheme: Marks are awarded if any testcase passes.

Allowed Languages: C, C++, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Scala 2.11.8, Swift, Visual Basic

5
LIVE EVENTS

CODE EDITOR

Enter your code or [Upload your code](#) as file.

Save

C (gcc 4.8.4)



```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello World!\n");
6     return 0;
7 }
8
```

1:1

☒ Provide custom input

COMPILE & TEST

SUBMIT

 Press Ctrl-space for autocomplete suggestions.

POWERED BY code table

LIVE EVENTS

 **Tip:** You can submit any number of times you want. Your best submission is considered for computing total score.Your Rating:

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