

About

- $I\ i$: Insert. Insert one integer i to the integer set.
- $R\ i$: Remove. Remove one integer i from the integer set. (If the integer set don't have any integer i , don't do anything.)
- $C\ i$: Count. Count the occurrence of integer i in the integer set, **output** the number. (If the integer set doesn't have any integer i , output "0".)

Input

The first line is an integer n , being the number of operations. Following n lines, each line contains one operation described above.

Restrictions

- $1 \leq n \leq 2 \times 10^6$
- $1 \leq i \leq 10^6$ for every i in all operations

Note that:

- In single testcase, the integers i of "Insert" operations may duplicate.

Output

For each "Count" operation, output one line.

Sample Input 1

```
11
I 7
I 5
I 4
C 5
R 5
R 5
C 5
I 5
I 5
I 5
C 5
```

Sample Output 1

```
1
0
3
```

Submissions

Rankings

View Contest

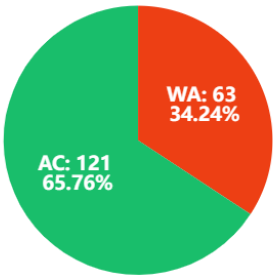
Information

ID	3
Time Limit	1000MS
Memory Limit	256MB
IO Mode	Standard IO
Created By	ta_david
Level	Low
Score	100
Tags	Show

Statistic

Details

AC WA



Language: C



Theme: Solarized Light



1

You have solved the problem

Submit for Sample Test

Submit

Contest has ended

Sample Test Input

Sample Test Output

11
I 7
I 5
I 4
C 5
R 5
R 5
C 5
I 5
I 5
I 5
C 5