



Утегенов Батырхан Елембетұлы [ADS-Lab-04]: Submit a solution

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## Submit a solution for I-105712. BST with multiplicities

Time limit: 1 s

Real time limit: 5 s

Memory limit: 256M

### Problem I: 105712. BST with multiplicities

You are given implementation of Binary Search Tree. You need to introduce new feature to the Binary Search Tree. It must be able to contain not or nodes with unique keys, but the number of copies of that key as well.

You are given several queries, each of them is of one the type:

- '*insert X*' - insert *X* into the tree, if it already in a tree - increase its multiplicity,
- '*delete X*' - decrease multiplicity of *X* by one, if it became zero - delete the node from the tree,
- '*cnt X*' - output the multiplicity of *X*.

To complete the task you need to download solution code from <https://bit.ly/3kWufJa> and make some extra changes in it. Remaining code w written for you.

### Input format

The first line contains single integer  $Q$  - number of queries ( $1 \leq Q \leq 10^3$ ). Each of the next  $Q$  lines contains one query.

### Output format

Print answer on each query of type '*cnt X*' in separate line.

### Examples

#### Input

```
4
insert 1
cnt 1
insert 1
cnt 1
```

#### Output

```
1
2
```

#### Input

```
8
insert 1
cnt 1
insert 1
cnt 1
delete 1
cnt 1
delete 1
cnt 1
```

#### Output

```
1
2
1
0
```

[Submit a solution](#)

Language: g++ - GNU C++ 11.4.0

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Previous submissions of this problem

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- A
- B
- C
- D
- E
- F
- G
- H
- I
- J

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