

# 282A - Bit++

Muhammad Arif Rifki

17 April 2024

## 1 Problem

Problem Description : <https://codeforces.com/problemset/problem/282/A>

## 2 Objective

The classic programming language of Bitland is Bit++. This language is so peculiar and complicated.

The language is that peculiar as it has exactly one variable, called  $x$ . Also, there are two operations:

- Operation  $++$  increases the value of variable  $x$  by 1.
- Operation  $--$  decreases the value of variable  $x$  by 1.

A statement in language Bit++ is a sequence, consisting of exactly one operation and one variable  $x$ . The statement is written without spaces, that is, it can only contain characters  $++$ ,  $--$ ,  $X$ . Executing a statement means applying the operation it contains.

A programme in Bit++ is a sequence of statements, each of them needs to be executed. Executing a programme means executing all the statements it contains.

You're given a programme in language Bit++. The initial value of  $x$  is 0. Execute the programme and find its final value (the value of the variable when this programme is executed).

**Input** The first line contains a single integer  $n$  ( $1 \leq n \leq 150$ ) — the number of statements in the program.

Next  $n$  lines contain a statement each. Each statement contains exactly one operation ( $++$  or  $--$ ) and exactly one variable  $x$  (denoted as letter  $X$ ). Thus, there are no empty statements. The operation and the variable can be written in any order.

**Output** Print a single integer — the final value of  $x$ .

### 3 Solution

Since the initial value is 0 (we call it  $a$ ), and for each statement if the statement contains a '+' sign, then add 1 to  $a$ , and if it contains '-', subtract  $a$  by 1.

## 4 Code

```
#include <bits/stdc++.h>
using namespace std;
int main(){
    int x, cnt = 0;
    cin >> x;
    string s;
    for (int i = 0; i < x; i++){
        cin >> s;
        if (s.find("+") != string::npos)
            cnt++;
        else
            cnt--;
    }
    cout << cnt;
    return 0;
}
```