

# Simple Language



You are given a program written on Simple Language. There's only one variable called  $x$  in this programming language. Initially,  $x = 0$ . The program consists of  $n$  lines. Each line is one of the following:

- **add  $y$**  ( $y$  is an integer) — add  $y$  to  $x$ .
- **set  $y$**  ( $y$  is an integer) — set the value of  $x$  to  $y$ .

Here's an example program and also illustrates what happens to  $x$  after running each line:

```
x = 0
add 5
x = 5
add -3
x = 2
set 1
x = 1
add -2
x = -1
add 5
x = 4
```

Given a program, your task is to remove some lines (possibly none or all of them) in such a way that the value of  $x$  after running the resulting program will be the maximum. Find this maximum value.

Complete the function `maximumProgramValue` which takes in an integer  $n$  denoting the number of lines of the program and returns the maximum value. You will need to take the program's lines from the standard input.

## Input Format

The first line contains a single integer  $n$ .

The next  $n$  lines describe the program. Each of these lines contains a string  $t$  and an integer  $y$  separated by a space, where  $t = \text{add}$  or  $t = \text{set}$ .

## Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $-10^9 \leq y \leq 10^9$

## Output Format

Print a single integer denoting the answer.

## Sample Input 0

```
3
add 2
set 1
add -1
```

## Sample Output 0

```
2
```

## Explanation 0

In this test case, the second and third lines of code are removed.

### Sample Input 1

```
2
set 5
add 6
```

### Sample Output 1

```
11
```

### Explanation 1

In this test case, no line of code is removed.

### Sample Input 2

```
3
add -1
set -3
add -2
```

### Sample Output 2

```
0
```

### Explanation 2

In this test case, all lines of code are removed.