Firebending

Time limit: 1.0s **Memory limit:** 16M

Vincent Massey SS - 2014 Senior Contest #1

Firebending is the element of power. Firebenders use their energy to create bursts of fire in order to overwhelm their opponent. As a result, they want to maximize the value of each fire blast that they shoot. In order to do so, they must revisit the art of mathematics.

You will be given n integers, one per line. For each of the integers, k_i, you can either keep it as k_i, or change it to $-k_i$. Find the maximum possible final sum of all the integers.

Input Specification

The first line will contain the integer n $(1 \leq n \leq 100\,000)$.
The next n lines will contain the integers k_i.

Output Specification

The largest possible final sum of the n integers.

Sample Input

```
3
1
-2
3
```

Sample Output

```
6
```

Explanation

Keep 1.
Change -2 to 2.
Keep 3.
Thus, the answer is $1 + 2 + 3 = 6$.