The contest is in progress. It ends about 9 hours from now.

Problem_AJ

Vangelis the bear has taken a liking to snowboarding and decided to go to the snowy mountains of Nowy Sacz to try. Being an amateur as he is, he cannot control his speed. He just slides down the hill hoping to cross the finishing line with as much speed as possible.

The hill is composed of N smaller parts and the slope of each part is represented by an integet number. In case the number is positive, for example 5, it means this part is a downhill and Vangelis will gain an additional speed of 5. Likiwise, if the number is negative, for example -5, it means this part is an uphill and Vangelis's speed will be reduced by 5. If the values is 0, then that part is flat and Vangelis's speed will not be affected.

Vangelis can choose which part will be his starting point. His initial speed is always 0.

Write a program that will calculate the maximum speed Vangelis can have when crossing the finishing line. In case Vangelis starts from the ending part his final speed will be 0.

Input Data

The first line contains the number N (where $2 \leq N \leq 2.000.000$) which represents the number of parts that the hill is composed of.

The second line contains N integer numbers separated by an empty character. The absolute value of all numbers is less or equal to 2000.
The finish line is always after the last part to the right. Vangelis must always cross the finish line.

Output Data

The output is composed of one line. That line contains exactly one integer number, the maximum speed Vangelis can have while crossing the finish line.

Sample Input 1:

```
9
4 16 -22 14 12 -11 9 -5 4
```

Sample Output 1:

```
23
```

Sample Input 2:

```
5
2 3 2 3 -20
```

Sample Output 2:

```
0
```

Problem Author: IEEE

Suggest Edits

Emacs | Normal | Vim

Select Language: C#

save code

```
1 using System;
2 using System.Collections.Generic;
3 using System.IO;
4 class Solution {
5     static void Main(String[] args) {
6         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class
  should be named Solution */
7     }
8 }
```

Line: 1 Col: 1 Count: 246

☐ **Use a custom test case**

Upload Code as File

Compile & Test | Submit Code

This is a beta version. Join us on IRC at #hackerrank on freenode for hugs or bugs.