

Problem D

Jumbo Javelin


Problem ID: jumbojavelin

CPU Time limit: 1 second

Memory limit: 1024 MB

Author: Jean Niklas L'orange

Source: IDI Open 2021

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Jessica wants to become a javelin thrower, moreover she wants to become a famous one. However, she doesn't want to train 40 hours a day. To avoid much training while still becoming famous, she has concocted a plan: make all her javelins gigantic.

As a software developer by day, she knows she needs a minimum viable javelin for testing, but also that you can glue existing things hastily together and get something that works alright.



Photo by Álvaro Pérez Vilariño, cropped and flipped

She has a couple of steel rods next to her bed – as one does – and decides to go to the blacksmith apprentice Jack to get him to fuse them together.

The good thing about Jack is that he'll fuse the steel rods together for free. But Jack isn't that good at fusing things together. When fusing two rods, the fused rod will lose 1 cm of their combined length.

That's not a problem for Jessica, but she wonders how big her javelin will become if Jack fuses all the rods together.

Input

The first line consist of an integer N , the number of steel rods she has. Then follows N lines, each containing a single integer l_i representing the length of the steel rod in cm.

Output

Print out the length of the jumbo javelin Jack has made for her.

Limits

- $1 < N \leq 100$
- $1 \leq l_i \leq 50$

Sample Input 1

```
4
21
34
18
9
```

Sample Output 1

```
79
```

Sample Input 2

```
3
1
50
40
```

Sample Output 2

```
89
```