Problem J
Walrus Weights

Wallace the Weightlifting Walrus is training for a contest where it will have to lift 1 000 kg. Wallace has some weight plates lying around, possibly of different weights, and its goal is to add some of the plates to a bar so that it can train with a weight as close as possible to 1 000 kg.

In case there exist two such numbers which are equally close to 1 000 (e.g. 998 and 1 002), Wallace will pick the greater one (in this case 1 002).

Help Wallace the Weightlifting Walrus and tell it which weight it will have to lift.

Input

The first line of the input contains the number of plates n ($1 \leq n \leq 1\,000$). Each of the following n lines contains one positive integer less than or equal to 1 000, denoting the weight of each plate.

Output

Output one integer, the combined weight closest to 1 000.

Sample Input 1

```
4
900
500
498
4
```

Sample Output 1

```
1002
```

Sample Input 2

```
1
1
```

Sample Output 2

```
1
```