COCI '13 Contest 1 #5 Organizator

Time limit: 0.6s **Memory limit:** 256M

Unexpected problems with law enforcement have convinced Mirko to take up a less lucrative but less morally ambiguous career: he has become the chief organizer of a team computer science contest.

There are N CS clubs that wish to participate in the contest. The presidents of the clubs are quite stubborn and will participate in the contest **only if** the contest team size makes it possible for all club members to participate.

The contest consists of two rounds: **qualifications** and **finals**. All teams that are competing must have an **equal** number of members and **all members** of one team must belong to the same club. Any number of teams from each club can participate in the qualification round, and the **best team** from each club earns a spot in the **finals**.

Mirko is aware that, with a new and unproven contest, he needs publicity. For that reason, he wants to set the team size such that the **number of individual participants** in the **finals** is as **large** as possible. Remember, each club that participates has a right to **one** team in the **finals**. Furthermore, at least **two** clubs must participate in the contest, otherwise the contest would be too boring to attract sponsors.

Determine the maximum possible number of participants in the finals so that Mirko can double check his team size choice.

Input

The first line of input contains the positive integer N $(2 \leq N \leq 200\,000)$, the number of clubs.

The second line of input contains N space-separated integers from the interval $[1, 2\,000\,000]$, the number of members of each club.

Output

The first and only line of output must contain the maximum possible number of finalists.

Scoring

In test data worth at least 30% of total points, N will be less than 1000.

Sample Input 1

```
3
1 2 4
```

Sample Output 1

```
4
```

Explanation

Mirko decides on 2 members per team, so clubs 2 and 3 participate.

Sample Input 2

```
2
1 5
```

Sample Output 2

```
2
```

Sample Input 3

```
5
4 6 3 8 9
```

Sample Output 3

```
9
```