

Best Pair

Given an array of N integers, find $\max(LCM(a_i, a_j))$ possible in the array such that $1 \leq i < j \leq N$.

In simple words, find max LCM possible of two values of the array, that are at distinct positions in the array. Print the max LCM possible.

Input Format

The first line of the input contains a single integer N , the size of the array.

Then, in the next line, we have N space separated integers, denoting the values of the array elements itself.

Constraints

$$2 \leq N \leq 500$$

$$1 \leq a_i \leq 10^9$$

Output Format

Print a single integer, the answer to the problem

Sample Input 0

```
5
10 10 10 10 10
```

Sample Output 0

```
10
```

Explanation 0

Choose any two indexes, take their LCM, it will come out 10 only. Hence, max of all LCM pairs will also come out to be 10 only.

Sample Input 1

```
3
9 11 2
```

Sample Output 1

```
99
```

Explanation 1

$$LCM(9,11)=99$$

$$\text{LCM}(11,2)=22$$

$$\text{LCM}(9,2)=18$$

Max of all is 99, and thus, the answer