A. Paint the Numbers

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given a sequence of integers $a_1, a_2, \ldots, a_n$. You need to paint elements in colors, so that:

- If we consider any color, all elements of this color must be divisible by the minimal element of this color.
- The number of used colors must be minimized.

For example, it's fine to paint elements $[40, 10, 60]$ in a single color, because they are all divisible by 10. You can use any color an arbitrary amount of times (in particular, it is allowed to use a color only once). The elements painted in one color do not need to be consecutive.

For example, if $a = [6, 2, 3, 4, 12]$ then two colors are required: let's paint 6, 3 and 12 in the first color (6, 3 and 12 are divisible by 3) and paint 2 and 4 in the second color (2 and 4 are divisible by 2). For example, if $a = [10, 7, 15]$ then 3 colors are required (we can simply paint each element in an unique color).

Input

The first line contains an integer n ($1 \le n \le 100$), where n is the length of the given sequence.

The second line contains n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le 100$). These numbers can contain duplicates.

Output

Print the minimal number of colors to paint all the given numbers in a valid way.

Examples

input Copy

```
6
10 2 3 5 4 2
```

output Copy

```
3
```

input Copy

```
4
100 100 100 100
```

output Copy

```
1
```

input Copy

```
8
7 6 5 4 3 2 2 3
```

output Copy

```
4
```

Note

In the first example, one possible way to paint the elements in 3 colors is:

- paint in the first color the elements: $a_1 = 10$ and $a_4 = 5$,
- paint in the second color the element $a_3 = 3$,
- paint in the third color the elements: $a_2 = 2$, $a_5 = 4$ and $a_6 = 2$.

In the second example, you can use one color to paint all the elements.

In the third example, one possible way to paint the elements in 4 colors is:

- paint in the first color the elements: $a_4 = 4$, $a_6 = 2$ and $a_7 = 2$,
- paint in the second color the elements: $a_2 = 6$, $a_5 = 3$ and $a_8 = 3$,
- paint in the third color the element $a_3 = 5$,
- paint in the fourth color the element $a_1 = 7$.
