

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, \dots, 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 ($1 \leq n \leq 100$), where n is the length of the given sequence.

The second line contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 100$). 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.

Codeforces Round #584 - Dasha Code Championship - Elimination Round (rated, open for everyone, Div. 1 + Div. 2)

Contest is running

02:28:20

Contestant

Submit?

Language: GNU G++11 5.1.0

Choose file: 选择文件 未选择任何文件

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

Submit

	Score
Problem A	500
Problem B	500
Problem C	1250
Problem D	1500
Problem E1	1000
Problem E2	1500
Problem F	2500
Problem G1	1500
Problem G2	2250
Problem H	4000
Successful hack	100
Unsuccessful hack	-50
Unsuccessful submission	-50
Resubmission	-50

* If you solve problem on 00:00 from the first attempt

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 $a_1 = 7$.

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