Day 1 Div C. Dynamic Programming

9 Mar 2019, 20:46:06
start: 9 Mar 2019, 17:00:00
finish: 9 Mar 2019, 21:00:00
till the end: 00:13:49
start: 9 Mar 2019, 17:00:00
end: 9 Mar 2019, 21:00:00
duration: 04:00:00

E.

Time limit	1 second
Memory limit	64Mb
Input	standard input or sequence.in
Output	standard output or sequence.out

Given a sequence of numbers $a_1, a_2, \ldots, a_n$; you are to find its longest sequentially-multiple subsequence.
The subsequence $a_{k_1}, a_{k_2}, \ldots, a_{k_t}$ ($k_1 < k_2 < \ldots < k_t$) is called sequentially-multiple if and only if $a_{k_i} \mid a_{k_j}$ for and i,j, such that $1 \leqslant i < j \leqslant t$ («$a|b$» means «b is multiple of a»). Subsequence of length 1 is sequentially-multiple by default.

Input format

First line of input contains the only positive integer N ($1 \leqslant N \leqslant 1000$) — length of given sequence. The second line contains N positive integers which don't exceed $2 \cdot 10^9$ — the sequence itself.

Output format

Print the only number — needed length of longest sequentiall-multiple subsequence.

Sample

Input	Output
4 3 6 5 12	3

Language GNU c11 4.9

Type here Send file

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1
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Submit

Previous Next