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/*                  North American */
/*    Invitational Programming Contest */
/* Hosted by the University of Chicago */
/*              28-30 March, 2014 */
```

E: GCDs

Given a sequence **A** of **n** numbers, define f(**lo**,**hi**), 1≤**lo**≤**hi**≤**n**, as the Greatest Common Divisor of all the numbers **A$_{lo}$** through **A$_{hi}$**, inclusive. Note that **lo** and **hi** are indices, not members of the list. Given an array, considering all possible values of **lo** and **hi**, how many unique values of f(**lo**,**hi**) will there be?

Input

There will be several test cases in the input. Each test case will begin with a line with a single integer **n** (1≤**n**≤100,000) representing the length of the sequence. The next **n** lines will each have an integer **a** (1≤**a**≤100). These are the numbers in the sequence, in sequence order. The input will end with a line with a single 0.

Output

For each test case, output a single integer denoting the number of unique values f(**lo**,**hi**) can have for the input sequence. Do not output any spaces, and do not print any blank lines between answers.

Sample Input	Sample Output
2	3
4	5
6	
3	
3	
6	
8	
0	