# Modulo

Given two integers A and B, A modulo B is the remainder when dividing A by B. For example, the numbers 7, 14, 27 and 38become 1, 2, 0 and 2, modulo 3. Write a program that accepts 10 numbers as input and outputs the number of distinct

Problem ID: modulo CPU Time limit: 1 second Memory limit: 1024 MB

Difficulty: 1.3

Source: Croatian Open Competition in Informatics 2006/2007, contest #1 License: For educational use

# Input

The input will contain 10 non-negative integers, each smaller than 1000, one per line.

numbers in the input, if the numbers are considered modulo 42.

# Output

Output the number of distinct values when considered modulo 42 on a single line.

# **Explanation of Sample Inputs**

In sample input 1, the numbers modulo 42 are 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10.

In sample input 2, all numbers modulo 42 are 0.

In sample input 3, the numbers modulo 42 are 39, 40, 41, 0, 1, 2, 40, 41, 0 and 1. There are 6 distinct numbers.

### Sample Input 1

## Sample Output 1

1	10
2	
3	
4	
5	
6	
7	
8	
9	
10	

# Sample Input 2

## Sample Output 2

42	
84 252 426 846 126 42 84 426 126	
420	
840	
126	
42	
84	
426	
126	

### Sample Input 3

### Sample Output 3

39	6
40	
41	
42	
40 41 42 43 44 82	
44	
82	
83	
83 84 85	
85	