

E. Divisibility Check

time limit per test: 2 seconds
memory limit per test: 64 megabytes
input: standard input
output: standard output

You are given an array of integers. Check whether there exists a number in this array which is divisible by all other numbers in this array. Output 1, if such a number exists, and 0 otherwise.

Input

The only line of the input contains a list of space-separated integers a_i ($1 \leq a_i \leq 100$) — elements of the array. The size of the array is between 2 and 10, inclusive. Note that the size of the array is not given explicitly!

Output

Output 1 if there exists element of this array which is divisible by all other elements of the array, and 0 otherwise.

Examples

input
6 12 4
output
1

input
3 13
output
0

input
26 13 12
output
0