

GCD

Problem:

Ayush loves arrays but hates to do his homework! His Maths teacher told him to find the Greatest Common Divisor (GCD) of some numbers. As you are his friend, he is asking for your help.

Hence he will give you an integer array consisting of n elements. You have to find GCD (Greatest Common Divisor, i.e. HCF) of all the element in the array.

Input:

For each case the first line will be the number of elements in the array.

Then n elements will follow (all elements will be greater than 0).

Output:

For each test case you have to output the GCD of elements in the array of that test case.

Sample:

Input:

4

4 6 8 10

Output:

2

Scoring:

There are 4 test cases. For each correct test case you will get 25 points.