You are given an array A of n positive integers $A_i$, $1 \le i \le n$, $1 \le A_i \le 10^9$. Find out how many different integers A contains. For example A = {1, 3, 2, 4, 1, 1, 3, 2} has 4 different integers in it (1, 2, 3 and 4).

## Input

The input consists of one line with integer n ($1 \le n \le 10^5$). Then the next line has n space separated positive integers $A_1$, $A_{2,}$ ..., $A_n$  ($1 \le A_i \le 10^9$).

## Output

Your program should print one integer: the number of different values in array A.

## Sample Input

10

12 15 6 9 4 15 9 12 9 4

## Sample Output

5