

Problem I. Distinct Numbers

Time limit 1000 ms

Mem limit 524288 kB

You are given a list of n integers, and your task is to calculate the number of *distinct* values in the list.

Input

The first input line has an integer n : the number of values.

The second line has n integers x_1, x_2, \dots, x_n .

Output

Print one integers: the number of distinct values.

Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $1 \leq x_i \leq 10^9$

Sample

Input	Output
5 2 3 2 2 3	2