Map

In a beautiful country, there was a great university. It was called "PUET". There was a teacher named Ajoy in that university. He used to run copy checker on everything he found.

One day during a sessional class he ran the copy checker on the students offlines.

The copy checker assigned an ID to all the submissions. Mr Ajoy knew that the submissions which had the same ID are actually the same. Now he wanted to know how many students actually solved the offline. But he has to meet someone, So he gave the task to you.

Input

The first line will contain an integer **N** (1 ≤ **N** ≤ 100000), the number of offlines.

The next line will contain **N** integers - the ID of each offline.

Every integer will be in the range **[1, 100000].**

Output

Print the number of students who actually solved the offline themselves in one line.

Example

Input:
5

2 1 3 2 100

Output:
4