2nd year Diversity in Array

locked

Problem Submissions Leaderboard Discussions

You are given n integers a1,a2,...,an. You choose any subset of the given numbers (possibly, none or all numbers) and negate these numbers (i. e. change x→(−x)). What is the maximum number of different values in the array you can achieve?

Input Format

The first line of input contains one integer t (1≤t≤100): the number of test cases.

The next lines contain the description of the t test cases, two lines per a test case.

In the first line you are given one integer n (1≤n≤100): the number of integers in the array.

The second line contains n integers a1,a2,...,an (−100≤ai≤100).

Constraints

1≤t≤100

1≤n≤100

−100≤ai≤100

Output Format

For each test case, print one integer: the maximum number of different elements in the array that you can achieve negating numbers in the array.

Sample Input 0

```
3
4
1 1 2 2
3
1 2 3
2
0 0
```

Sample Output 0

```
4
3
1
```

Explanation 0

In the first example we can, for example, negate the first and the last numbers, achieving the array [−1,1,2,−2]

with four different values.

In the second example all three numbers are already different.

In the third example negation does not change anything.

Submissions: 3
Max Score: 100
Difficulty: Medium

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Thanks!

More

Python 3

```
1
```

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