Emptying Array

You are given an array of integers. In one operation, you can:

1) Pick two numbers x and y, and remove them if and only if x!=y
2) Remove a number x.

What is the minimum number of operations required to remove all numbers from the array?

Input

First line contains T, number of testcases. Every testcase starts with n, number of integers in the array. Then n integers follow.

Output

Output T lines, answer for each test case.

Constraints

1<=T<=10
1<=n<=100000
1<=a[i]<=100000

Sample Input

```
3
2
1 2
2
1 1
3
1 2 3
```

Sample Output

```
1
2
2
```