


Chef and Numbers | CodeChef

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Chef and Numbers Problem Code: RECNDNOS Submit

Chef has NN dishes of different types arranged in a row: A_1, A_2, \dots, A_N , where A_i denotes the type of the i^{th} dish. He wants to choose as many dishes as possible from the given list but while satisfying two conditions:

1. He can choose **only one** type of dish.
2. No two chosen dishes should be adjacent to each other.

Chef wants to know which type of dish he should choose from, so that he can pick the maximum number of dishes.

Example:

Given $NN=99$ and $AA=[1,2,2,1,2,1,1,1,1][1,2,2,1,2,1,1,1,1]$.

For **type 1**, Chef can choose at most four dishes. One of the ways to choose four dishes of type 1 is A_1A_4, A_7A_7 and A_9A_9 .

For **type 2**, Chef can choose at most two dishes. One way is to choose A_3A_3 and A_5A_5 .

So in this case, Chef should go for **type 1**, in

which he can pick more dishes.

Input:

- The first line contains T , the number of test cases. Then the test cases follow.
- For each test case, the first line contains a single integer N .
- The second line contains N integers A_1, A_2, \dots, A_N .

Output:

For each test case, print a single line containing one integer — the **type** of the dish that Chef should choose from. If there are multiple answers, print the **smallest** one.

Constraints

- $1 \leq T \leq 10^3$
- $1 \leq N \leq 10^3$
- $1 \leq A_i \leq 10^3$
- Sum of N over all test cases doesn't exceed 10^4

Sample Input:

```
3
5
1 2 2 1 2
6
1 1 1 1 1 1
8
1 2 2 2 3 4 2 1
```

Sample Output:

```
1
1
2
```

Explanation:

Test case 1:

For both **type 1** and **type 2**, Chef can pick at most two dishes. In the case of multiple answers, we pick the smallest one. Hence the answer will be 11.

Test case 2:

There are only dishes of **type 1**. So the answer is 11.

Test case 3:

For **type 1**, Chef can choose at most two dishes. For **type 2**, he can choose three dishes. For **type 3** and **type 4**, Chef can choose the only dish available. Hence the maximum is in **type 2** and so the answer is 22.

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