Fence Colouring

You have N fences, and you want to colour them. You have N total types of colours numbered $1, 2, \ldots, N$.

Currently, all the N fences are coloured with the type 1 colour. At the end, you want the i-th fence to have a colour of A_i for every $1 \leq i \leq N$.

You can choose to do one of the following at each minute:

- Colour all N fences at the same time with type X colour, where you can choose $X (1 \leq X \leq N)$.
- Colour a specific fence i with type X colour, where you can choose $X (1 \leq X \leq N)$.

Both of the above operations take only 1 minute to perform. What is the minimum number of minutes needed to colour the entire fence as desired.

Input Format

- The first line of input will contain a single integer T, denoting the number of test cases.
- Each test case consists of multiple lines of input.
  - The first line of each test case contains N - the number of fences.
  - The second line contains N integers - $A_1, A_2, \ldots, A_N$.

Output Format

For each test case, output on a new line the minimum time needed to colour all N fences.

Constraints

- $1 \leq T \leq 10^4$
- $2 \leq N \leq 2 \cdot 10^5$
- $1 \leq A_i \leq N$
- The sum of N over all test cases does not exceed $2 \cdot 10^5$.

Sample 1:

Input	Output
3 2 1 2 3 3 3 3 6 2 1 3 2 5 2	1 1 4

Explanation: