Problem C. Mr. Panda and Strips

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Input file:     Standard Input
Output file:    Standard Ouptut
Time limit:     3 seconds
```

Mr. Panda loves colorful strips very much. One day, his friend bought him a long strip with N colors in a row. C_0, C_1, $\cdots$, C_{N-1} from left to right. Unfortunately, Mr. Panda only likes strips with distinct colors, so his friend is going to cut the strip into several parts and then either pick one part or glue **TWO** of them to form a new strip A_0, A_1, $\cdots$, A_{K-1}. In order to make Mr. Panda happy, the new strip should only consist of distinct colors, which means there doesn't exist $0 \leq i < j < K$ that $A_i = A_j$. His friend also wants the strip to be as long as possible. Find out the maximum possible length of the new strip.

Input

The first line of the input gives the number of test cases, T. T test cases follow. Each test case starts with an integer N, which means the number of colors in the original strip. Then one line consists of N integers C_0, C_1, $\cdots$, C_{N-1} representing the colors.

Output

For each test case, output one line containing "`Case #x: y`", where `x` is the test case number (starting from `1`) and `y` is the maximum possible length of the new strip.

Limits

- $1 \leq T \leq 20$.
- $1 \leq N \leq 1000$.
- $1 \leq C_i \leq 10^5$.

Sample input and output

Sample Input	Sample Output
3 3 1 2 3 8 3 1 2 1 6 1 2 5 3 1 1 1	Case #1: 3 Case #2: 5 Case #3: 1

Note

`Case #1:`

Cut into 2 parts: `[1]` `[2 3]`, and then glue the two parts together to form a strip: `[1 2 3]`; or just cut into one part: `[1 2 3]` then no need to glue at all.

`Case #2:`

Cut into 3 parts: `[3]` `[1 2]` `[6 1 2 5]`, and then glue the first and the third parts to form a strip: `[3 6 1 2 5]`.

Case #3:

Cut into 3 parts: [1] [1] [1], and then can pick one part to form a new strip: [1].