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## C. Cool Partition

time limit per test: 2 seconds memory limit per test: 256 megabytes

Yousef has an array a of size n. He wants to partition the array into one or more contiguous segments such that each element  $a_i$  belongs to exactly one segment.

A partition is called cool if, for every segment  $b_j$ , all elements in  $b_j$  also appear in  $b_{j+1}$  (if it exists). That is, every element in a segment must also be present in the segment following it.

For example, if a=[1,2,2,3,1,5], a cool partition Yousef can make is  $b_1=[1,2]$ ,  $b_2=[2,3,1,5]$ . This is a cool partition because every element in  $b_1$  (which are 1 and 2) also appears in  $b_2$ . In contrast,  $b_1=[1,2,2]$ ,  $b_2=[3,1,5]$  is not a cool partition, since 2 appears in  $b_1$  but not in  $b_2$ .

Note that after partitioning the array, you do **not** change the order of the segments. Also, note that if an element appears several times in some segment  $b_j$ , it only needs to appear at least once in  $b_{j+1}$ .

Your task is to help Yousef by finding the maximum number of segments that make a *cool* partition.

## Input

The first line of the input contains integer t ( $1 \le t \le 10^4$ ) — the number of test cases.

The first line of each test case contains an integer n ( $1 \leq n \leq 2 \cdot 10^5$ ) — the size of the array.

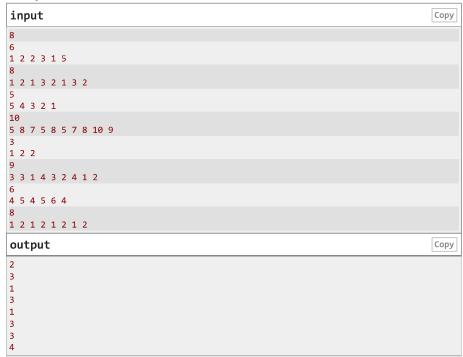
The second line of each test case contains n integers  $a_1, a_2, \ldots, a_n$   $(1 \le a_i \le n)$  — the elements of the array.

It is guaranteed that the sum of n over all test cases doesn't exceed  $2 \cdot 10^5$ .

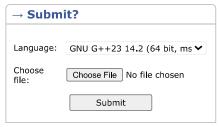
## Output

For each test case, print one integer — the maximum number of segments that make a *cool* partition.

## Example







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The first test case is explained in the statement. We can partition it into  $b_1=[1,2]$ ,  $b_2=[2,3,1,5]$ . It can be shown there is no other partition with more segments.

In the second test case, we can partition the array into  $b_1=[1,2]$ ,  $b_2=[1,3,2]$ ,  $b_3=[1,3,2]$ . The maximum number of segments is 3.

In the third test case, the only partition we can make is  $b_1=[5,4,3,2,1]$ . Any other partition will not satisfy the condition. Therefore, the answer is 1.

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