Problem A
Gunpla Collection

Gunpla, a portmanteau word for "Gundam Plastic Model", is a model kit (made of plastic) depicting the vehicles (also called mechas) of the Gundam universe, a popular robot/mecha anime (computer animation) from Japan.

Erick is a hardcore fan of Gundam and owns N Gunpla in his collection. Each Gunpla comes with a serial number P_i.

Erick also has N immovable platforms arranged in a single line to display his Gunpla, so, 1 platform for 1 Gunpla.

One day, a wild idea struck Erick's mind. He decides to rearrange the Gunpla into increasing order of their serial numbers. Erick cannot move the platforms but he can grab and move the Gunpla from one platform to another platform. However, moving a Gunpla comes with a risk: Erick might accidentally damage the Gunpla, thus, he wants to minimize the number of Gunpla he needs to move. In particular, Erick will not move any Gunpla that has already on their correct platform.

Your task in this problem is to find out how many Gunpla that Erick needs to move such that all the Gunpla are arranged in increasing order of their serial numbers.

For example, let $N = 6$ and the Gunpla are initially in the following order: (600, 100, 200, 400, 300, 500).

```
   initial order : 600  100  200  400  300  500
   desired order : 100  200  300  400  500  600
correct platform : no   no   no   yes  no   no
```

In this example, you can see that only the Gunpa with a serial number of 400 is already on its correct platform, thus, Erick needs to move the remaining 5.

Input

Input begins with an integer T ($1 \leq T \leq 1000$) representing the number of cases.

Each case begins with an integer N ($1 \leq N \leq 50\,000$) representing the number of Gunpla. The next line contains N integers P_i ($1 \leq P_i \leq 10^6$; $P_i \neq P_j$ if $i \neq j$) representing the serial number of each Gunpla. The Gunpla are initially arranged as in the given input order.

It is guaranteed that the sum of N over all cases does not exceed $300\,000$.

Output

For each case, output in a line "`Case #X: Y`" (without quotes) where `X` is the case number (starts from 1) and `Y` is the output for the respective case.

Sample Input #1

```
3
6
600 100 200 400 300 500
4
22 55 44 11
5
17 19 32 33 40
```

Sample Output #1

```
Case #1: 5
Case #2: 3
Case #3: 0
```

Explanation for the sample input/output #1

For the 2^{nd} case, Erick needs to move Gunpla with serial numbers 22, 55, and 11.

For the 3^{rd} case, all the Gunpla are already on their correct platform.