Problem 4: Commuting in Clumps
7 Points

Problem ID: `commute`

Rank: 1

Introduction

As the top traffic inspector in your region, you're looking at highways and avenues all day long. However, one road you'd rather not work with is the single-lane highway connecting all the neighborhoods in your town. One day, on the way to work, you notice all the different types of drivers in front and behind you: the slow ones, the fast ones, and the idiots who think the shoulder lane is for passing. However, you notice one additional thing: the car in front of you is going way slower than you'd like, and it's slowing down all the cars behind you! That causes you to think: how do slow drivers affect traffic?

Your task is to create a program that will output the number of traffic clumps that will form given cars' maximum driving speeds.

Program Input

The first line of the input from STDIN will contain a positive integer T denoting the number of test cases that follow. Each test case will have the following input:

- A single line consisting of two values separated by a space. The values are as follows:
  - A positive integer n denoting the number of cars on the road.
  - A comma-separated sequence of n non-negative integers $s_{1..n}$, denoting each car's maximum driving speed. The car in front's maximum speed is listed on the left, and the last car's maximum speed is listed on the right.

Example Input:

```
3
3 4,5,3
5 1,1,1,1,1
10 19,34,24,20,26,15,38,22,45,12
```

Program Output

For each test case, your program should correctly output the number of traffic clumps formed according to the following criteria:

- A clump consists of a group of consecutive cars all going the same speed.
- Cars will drive their maximum driving speed unless the driver in front of them is driving slower. In that case, the car would match their speed to avoid a collision.

Example Output:

```
2
1
3
```

Problem Constraints

$T \leq 1.0 \times 10^6$

$1 \leq n \leq 1.0 \times 10^8$

$0 \leq s_{1..n} \leq 1.0 \times 10^8$