

Shooter Mofiz

Mofiz is one of the most qualified solver to mention when talking about hobbies and other domains of personality training despite of his qualifications in ACM problem solving and math. It's very known about Mofiz his obsession in hunting and shooting, he used to pass hours training on empty cans in his childhood. These days, Mofiz became a professional and still challenge others in this game, but for his bad luck he accidentally challenged a professional solver, without mentioning the name, so this solver made a game for Mofiz. He numbered N targets for Mofiz with random numbers and challenged him to shoot the minimum number of targets so the remaining numbers will form a sequence of increasing (by one) numbers in their current order. **Example: if there is 6 targets numbered as follow: 2 5 7 3 2 4 Mofiz will shoot 5,7 and the second 2 remaining for 2 3 4.** Now, Mofiz will focus on shooting, we will help him and focus on the targets he must shoot. But No! Mofiz is an very good solver, we will make it hard for him and just tell him the number of the remaining targets in the sequence.

INPUT

First line contain an integer T represents the number of test cases $0 < T < 100$, each test case consists of two lines, the first one is an integer $0 < N < 20000$ represents the number of targets, then followed by the second line that contains N numbers each number $0 < X_i < 20000$ represents the number written on the i 'th target.

OUTPUT

For each test case print one number represents the remaining sequence's length can be created by the input where it should be the maximum length and each number of it follow its previous by 1.

INPUT

```
4
6
2 5 7 3 2 4
7
2 18 65 33 11 5 4
5
2 7 5 9 3
5
9 8 7 10 11
```

OUTPUT

```
3
1
2
3
```