

Pancake Fever!!!

Time Limit:1s

Monica favourite food is pancake. Even, everytime Monica goes with her family to Living Plaza, Istana Plaza, Trans Studio Mall, 23 Paskal, and Paris Van Java. She always let herself indulge in pancake with honey dew. But of course the one who needs to pay is her mom. To decrease the expenses, her mom told her to made herself a pancake at home. In the end, Monica tried to make herself a pancake.

One day, she let you to come to her house and eat her pancake. When you arrived on her house, you are surprised with stack of pancake that stacked messily. And Monica are trying to spin and sorted them from little rounded size to bigger one. To sort them, you need to hold the pancake on the top with your hand, and take the bottom you one to sort with spoon and spin them.

The size of pancakes:

| | | |
|------|------|---|
| 5 | 4 | 1 |
| 1 | 3 | 2 |
| 2 => | 2 => | 3 |
| 3 | 1 | 4 |
| 4 | 5 | 5 |

by sorting the pancake from the bottom, followed on spin them on the second from the bottom.

After finished sorting the pancakes, you as her best friend want to help her sorting them, by made her an application that can give her the sum of the fastest steps to sorting them.

Input:

The application will need the input for how many test cases. The number of test cases won't be larger than 100. And then followed by the number of pancakes, with the maximum of the pancakes quantity 100. After that, the program will ask for the sizes for every pancakes. The size of the pancakes will differ with no more than 1000cm.

Output:

The program will give the steps that Monica need to do in every cases for that pancakes to be sorted. If the pancakes are sorted, the program will give output 0 in the end of each steps.

Input:

4
5
1 2 3 4 5
6
6 5 4 3 2 1
7
4 3 2 1 5 20 100
5
4 2 1 3 5

Output:

0
1 0
4 0
2 3 4 0