Problem D
A Special Automobile Race

Input file: *testdata.in*
Time limit: 2 second

Problem Description

There is a special automobile race. The race do not care about who can drive fast, but care about who is good in math. There are n intermediate stations before terminal station. For each station, the distance between the station and it's next station is 1. If a player wants to stay in a station, he must change an automobile in that station. The automobiles in different stations can run different distances. For example, if the distance is 3, the automobile will be able to run to at least next 3 stations.

The winner is the player who has stayed the least number of stations. Now Bob wants to know how many stations are needed to win the race. Write a program to help Bob find the minimum number of stations that are needed.

Input Format

The input contains several test cases. Each test case contains two lines. The first line contains an integer. The integer denotes the number of total intermediate stations n. The value of n is between 1 and 200000. The second line has n integers. Every integer denotes the distance that the automobile in that station can run. Each input in this line is between 1 and 20.

Furthermore, for each input, we suppose that the automobile in the starting point can run to at least next 5 stations. The last line of input is only one 0 indicating the end of input.

Output Format

For each input data, print the minimum number of stations that are needed.

Sample Input

```
4
4 4 4 4
5
5 4 3 2 1
6
1 1 1 1 1 1
8
4 4 4 4 1 1 1 1
10
10 8 6 4 2 5 4 3 2 1
20
5 5 5 2 2 5 5 5 2 2 5 5 5 2 2 3 3 3 1 1
0
```

Sample Output

```
0
1
2
2
1
4
```