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A -*Directi* Educational Initiative

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Little Chef and Sums   Problem Code: **CHEFSUM**   Submit (/SEPT17/submit/CHEFSUM)

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Our little chef is fond of doing additions/sums in his free time. Today, he has an array **A** consisting of **N** positive integers and he will compute prefix and suffix sums over this array.

He first defines two functions **prefixSum(i)** and **suffixSum(i)** for the array as follows. The function **prefixSum(i)** denotes the sum of first **i** numbers of the array. Similarly, he defines **suffixSum(i)** as the sum of last **N - i + 1** numbers of the array.

Little Chef is interested in finding the minimum index **i** for which the value **prefixSum(i) + suffixSum(i)** is the minimum. In other words, first you should minimize the value of **prefixSum(i) + suffixSum(i)**, and then find the least index **i** for which this value is attained.

Since, he is very busy preparing the dishes for the guests, can you help him solve this problem?

Input

The first line of the input contains an integer **T** denoting the number of test cases.

The first line of each test case contains a single integer **N** denoting the number of integers in the array **A**.

The second line contains **N** space-separated integers A_1, A_2, ..., A_N denoting the array **A**.

Output

For each test case, output a single line containing the answer.

Constraints

- $1 \le T \le 10$
- $1 \le N, A[i] \le 10^5$

Subtasks

- **Subtask #1 : (20 points)** $1 \le N \le 100$
- **Subtask #2 : (80 points)** Original constraints

Example

```
Input:
2
3
1 2 3
4
2 1 3 1

Output:
1
2
```

Explanation

Example case 1. Let's calculate prefixSum(i) + suffixSum(i) for all indexes **i** in the sample case.

```
prefixSum(1) + suffixSum(1) = 1 + 6 = 7
prefixSum(2) + suffixSum(2) = 3 + 5 = 8
prefixSum(3) + suffixSum(3) = 6 + 3 = 9
```

The minimum value of the function is 7, which is attained at index 1, so the answer would be 1.

Example case 2. Let's calculate prefixSum(i) + suffixSum(i) for all indexes **i** in the sample case.

```
prefixSum(1) + suffixSum(1) = 2 + 7 = 9
prefixSum(2) + suffixSum(2) = 3 + 5 = 8
prefixSum(3) + suffixSum(3) = 6 + 4 = 10
prefixSum(4) + suffixSum(4) = 7 + 1 = 8
```

The minimum value of the function is 8, which is achieved for indices 2 and 4. The minimum of these two indices 2, 4 is index 2. Hence, the answer will be 2.

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Date Added:	27-08-2017
Time Limit:	1 secs
Source Limit:	50000 Bytes
Languages:	ADA, ASM, BASH, BF, C, C99 strict, CAML, CLOJ, CLPS, CPP 4.3.2, CPP 6.3, CPP14, CS2, D, ERL, FORT, FS, GO, HASK, ICK, ICON, JAVA, JS, LISP clisp, LISP sbcl, LUA, NEM, NICE, NODEJS, PAS fpc, PAS gpc, PERL, PERL6, PHP, PIKE, PRLG, PYPY, PYTH, PYTH 3.5, RUBY, SCALA, SCM chicken, SCM guile, SCM qobi, ST, TCL, TEXT, WSPC

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CodeChef (http://www.codechef.com) - A Platform for Aspiring Programmers

CodeChef was created as a platform to help programmers make it big in the world of algorithms, **computer programming** and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and another smaller programming challenge in the middle of the month. We also aim to have training sessions and discussions related to **algorithms**, **binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

Practice Section (https://www.codechef.com/problems/easy) - A Place to hone your 'Computer Programming Skills'

Try your hand at one of our many practice problems and submit your solution in a language of your choice. Our **programming contest** judge accepts solutions in over 35+ programming languages. Preparing for coding contests were never this much fun! Receive points, and move up through the CodeChef ranks. Use our practice section to better prepare yourself for the multiple **programming challenges** that take place through-out the month on CodeChef.

Compete (https://www.codechef.com/problems/easy) - Monthly Programming Contests and Cook-offs

Here is where you can show off your **computer programming skills**. Take part in our 10 day long monthly coding contest and the shorter format Cook-off **coding contest**. Put yourself up for recognition and win great prizes. Our **programming contests** have prizes worth up to INR 20,000 (for Indian Community), $700 (for Global Community) and lots more CodeChef goodies up for grabs.

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Domain Registration in India (http://www.bigrock.in/) and Web Hosting (http://www.bigrock.com/web-hosting/) powered by BigRock