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Uncle Johny   Problem Code: **JOHNY**   Submit (/submit/JOHNY) ✓

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Vlad enjoys listening to music. He lives in Sam's Town. A few days ago he had a birthday, so his parents gave him a gift: MP3-player! Vlad was the happiest man in the world! Now he can listen his favorite songs whenever he wants!

Vlad built up his own playlist. The playlist consists of **N** songs, each has a **unique** positive integer length. Vlad likes all the songs from his playlist, but there is a song, which he likes more than the others. It's named "Uncle Johny".

After creation of the playlist, Vlad decided to sort the songs in increasing order of their lengths. For example, if the lengths of the songs in playlist was {1, 3, 5, 2, 4} after sorting it becomes {1, 2, 3, 4, 5}. Before the sorting, "Uncle Johny" was on **K**-th position (1-indexing is assumed for the playlist) in the playlist.

Vlad needs your help! He gives you all the information of his playlist. Your task is to find the position of "Uncle Johny" in the sorted playlist.

Input

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

The first line of each test case contains one integer **N** denoting the number of songs in Vlad's playlist. The second line contains **N** space-separated integers A_1, A_2, ..., A_N denoting the lenghts of Vlad's songs. The third line contains the only integer **K** - the position of "Uncle Johny" in the initial playlist.

Output

For each test case, output a single line containing the position of "Uncle Johny" in the sorted playlist.

Constraints

1 ≤ **T** ≤ 1000

1 ≤ **K** ≤ **N** ≤ 100

$1 \le A_i \le 10^9$

Example

```
Input:
3
4
1 3 4 2
2
5
1 2 3 9 4
5
5
1 2 3 9 4
1

Output:
3
4
1
```

Explanation

In the example test there are **T**=3 test cases.

Test case 1

In the first test case **N** equals to 4, **K** equals to 2, **A** equals to {1, 3, 4, 2}. The answer is **3**, because {1, 3, 4, 2} -> {1, 2, 3, 4}. A_2 now is on the **3**-rd position.

Test case 2

In the second test case **N** equals to 5, **K** equals to 5, **A** equals to {1, 2, 3, 9, 4}. The answer is **4**, because {1, 2, 3, 9, 4} -> {1, 2, 3, 4, 9}. A_5 now is on the **4**-th position.

Test case 3

In the third test case **N** equals to 5, **K** equals to 1, **A** equals to {1, 2, 3, 9, 4}. The answer is **1**, because {1, 2, 3, 9, 4} -> {1, 2, 3, 4, 9}. A_1 stays on the **1**-th position.

Note

"Uncle Johny" (http://www.last.fm/music/The+Killers/_/Uncle+Johny) is a real song performed by The Killers.

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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 two smaller programming challenges at the middle and end 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**.

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