



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

Please read the new rule regarding the restriction on the use of AI tools.

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PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

# A. Robin Helps

time limit per test: 1 second memory limit per test: 256 megabytes

There is a little bit of the outlaw in everyone, and a little bit of the hero too.

The heroic outlaw Robin Hood is famous for taking from the rich and giving to the poor.

Robin encounters n people starting from the 1-st and ending with the n-th. The i-th person has  $a_i$  gold. If  $a_i \geq k$ , Robin will take all  $a_i$  gold, and if  $a_i = 0$ , Robin will give 1 gold if he has any. Robin starts with 0 gold.

Find out how many people Robin gives gold to.

#### Inpu

The first line of the input contains a single integer t ( $1 \le t \le 10^4$ ) — the number of test cases.

The first line of each test case contains two integers n, k ( $1 \le n \le 50, 1 \le k \le 100$ ) — the number of people and the threshold at which Robin Hood takes the gold.

The second line of each test case contains n integers  $a_1, a_2, \ldots, a_n$  ( $0 \le a_i \le 100$ ) — the gold of each person.

#### Output

For each test case, output a single integer, the number of people that will get gold from Robin Hood.

## Example



#### Note

In the first test case, Robin takes 2 gold from the first person and gives a gold to the second person.

In the second test case, Robin takes 3 gold and gives 1 gold to each of the next 2 people.

In the third test case, Robin takes 3 gold and so only gives gold to 3 other people.

# Codeforces Round 974 (Div. 3) Finished

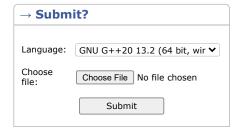
# Practice



### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you -solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you -solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest







9/21/24, 11:05 PM Problem - A - Codeforces

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