Donald Drumpf has spent the entire summer lobbying to gather votes for the upcoming student government election. At his University, there are a total of **N** students. Each student in the university casts a vote. The size of student government is determined by the number of students that get at least **K** votes.

Each person that receives at least **K** votes is given a post in the student government. The Dean noticed that every year, there are a few students who vote for themselves. He decided to add a rule to disqualify any such individuals who vote for themselves i.e they cannot be part of the student government.

You are given an array **A**, where $\mathbf{A_i}$ denotes the person who the **i**-th person voted for. Can you compute the size of the student government?

Input

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

For each test case, first line consists of two space separated integers **N**, **K**.

Second line consists of **N** space separated integers denoting the array **A**, where **i**-th integer denotes $\mathbf{A_i}$.

Output

For each test case, output a single line containing an integer corresponding to the size of the student government.

Constraints

- $\mathbf{1 \leq T \leq 100}$
- $\mathbf{1 \leq K \leq N}$
- $\mathbf{1 \leq A_i \leq N}$

Subtasks

Subtask #1: (30 points)

- $\mathbf{1 \leq N \leq 3}$

Subtask #2: (70 points)

- $\mathbf{1 \leq N \leq 100}$

Sample 1:

Input	Output
2 3 2 2 1 2 2 1 1 2	1 0

Explanation:

In **first test case**, there are **3** students. A student must receive at least **2** votes to be part of the student government. Student **1** votes for student **2**, student **2** votes for student **1** and student **3** votes for student **2**. Thus, Student **2** receives **2** votes and is the only one eligible for student government.

In **second test case**, although both students receive the required amount of votes, they are both disqualified as they had voted for themselves. Thus, size of the student government is **0**.