## Halum and Candies

Halum has been elected as the captain of his school's football team. To celebrate this, he is going to throw a party. Halum bought candies of $\mathbf{N}$ different flavors for the party. There are $\mathbf{a}_{\mathbf{i}}$ number of candies of the $\mathrm{i}^{\text {th }}$ flavor where ( $\mathbf{1 \leq i \leq N}$ ). To satisfy a guest he has to give him/her some positive number of candies of at least $\mathbf{K}$ different flavors. Otherwise the guest is not satisfied. Given this information now you have to find the maximum number of guests Halum can satisfy with the available candies.

## Input

First line of the input contains an integer $\mathbf{T}(\mathbf{1} \leq \mathbf{T} \leq \mathbf{2 0 0})$, denoting the number of test cases. $\mathbf{T}$ cases follow.
First line of each case contains two integers $\mathbf{N}$ and $\mathrm{K}(1 \leq K \leq N \leq 1000)$. $\mathbf{N}$ space separated integers $a_{1}, a_{2} \ldots a_{N}$ follow in the next line ( $\left.0 \leq a_{i} \leq 10^{\wedge} 9\right)$. The $i^{\text {th }}$ of these integers $a_{i}$ denotes the number of candies of $\mathrm{i}^{\text {th }}$ flavor $(\mathbf{1} \mathbf{i} \leq \mathbf{N})$.

## Output

For each case print one line containing "Case $\mathbf{X}: \mathbf{Y}$ " (without the quotes) where $\mathbf{X}$ is the case number starting from $\mathbf{1}$ and $\mathbf{Y}$ is an integer denoting the maximum number of guests who can be satisfied.

## Example

Input:
3
33
123
31
123
32
324

Output:
Case 1: 1
Case 2: 6
Case 3: 4

