

Arrays:Jon and his Update

Jon is playing with the numbers present in a array. He want to decided to update value of its element. In one second he can increase value of each array element by 1. He wants each array element's value to become greater than or equal to Key. Please help Jon to find out the minimum amount of time it will take, for him to do so.

Input Format

First line consists of a single integer, T, denoting the number of test cases. First line of each test case consists of two space separated integers denoting N and Key. Second line of each test case consists of N space separated integers denoting the array Arr.

Constraints

$1 \leq T \leq 5$ $1 \leq N \leq 10^5$

$1 \leq \text{Arr}[i], \text{Key} \leq 10^5$

Output Format

For each test case, print the minimum time in which all array elements will become greater than or equal to K. Print a new line after each test case.

Sample Input 0

```
2
3 4
1 2 5
3 2
2 5 5
```

Sample Output 0

```
3
0
```

Explanation 0

For first test case, After 1 second, array will be {2, 3, 6} After 2 second, array will be {3, 4, 7} After 3 second, array will be {4, 5, 8}

So it will take 3 second for all array elements to become greater than or equal to 4.