Number List



Sam is playing with an array, A, of N positive integers. Sam writes a list, S, containing all A's *contiguous subarrays*, and then replaces each subarray with its respective *maximum element*.

For example, consider the following \emph{A} where $\emph{N}=3$:

$$A = \{1, 2, 3\}$$

Subarrays of
$$A$$
: $S_{initial} = \{\{1\}, \{2\}, \{3\}, \{1,2\}, \{2,3\}, \{1,2,3\}\}$ Updated (Maximum) Subarrays: $S_{maximums} = \{\{1\}, \{2\}, \{3\}, \{2\}, \{3\}, \{3\}\}$

Help Sam determine how many numbers in $S_{maximums}$ are $greater\ than\ K$.

Input Format

The first line contains a single integer, T (the number of test cases). Each test case is described over two lines:

The first line of each test case contains two space-separated integers, N (the number of elements in array A) and K, respectively.

The second line of each test case contains N space-separated integers describing the elements in A.

Constraints

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1 \le T \le 10^5
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$$1 \le N \le 2 imes 10^5$$

$$1 \le A_i \le 10^9$$

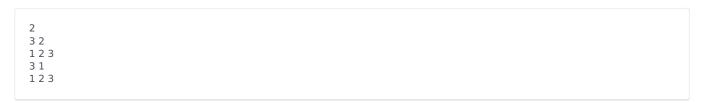
$$0 \le K \le 10^9$$

The sum of N over all test cases does not exceed 10^6 .

Output Format

For each test case, print the number of maximums > K in $S_{maximums}$ on a new line.

Sample Input



Sample Output

3 5

Explanation

Both test cases use the same A as described in the *Problem Statement*, so $S_{maximums} = \{\{1\}, \{2\}, \{3\}, \{2\}, \{3\}, \{3\}\}\}$ for both test cases.

Test Case 0: K=2

 $S_{maximums}$ has 3 elements > 2, so we print 3.

Test Case 1: K = 1

 $S_{maximums}$ has 5 elements > 1, so we print 5.