Inversion Play

There is an array A of n elements . You need to tell the number of subarrays having inversion count greater than equal to a particular value K.

Constraints :
1<=N<=1*10^5
1<=K<=N*(N-1)/2
1<=A[i]<=10^9

Input

The first line will contain two space separated integers N and K.

The next line will contain N space separated integers representing the elements of the array.

Output

Print the answer to the given problem in one line.

Example

Input:
5 3
5 4 3 2 1

Output:
6