

Week 4

Problem 2

Problem Statement:

Given an array a of n integers, find out number of pairs of indices i and j of the array a , such that the $i < j$ and $a[i] > a[j]$.

Input:

The first line contains a single integer n denoting the length of the array.

The second line contains n space separated integers $a_1 a_2 \dots a_n$, representing the array a .

Output:

Print a single integer denoting the answer the problem.

Constraints:

$$1 \leq n \leq 10^5$$

$$-1 \cdot 10^9 \leq a_i \leq 1 \cdot 10^9$$

Sample Testcases:

Input	Output
5 1 2 3 4 5	0

Input	Output
5 5 4 3 2 1	10