Problem 3

Dexter is a victim of Obsessive-Compulsive Disorder (OCD). He wants everything to be tidy. That's why whenever he sees a set of integers that's not sorted ascendingly, he becomes unable to control himself and tries to sort it back as quickly as possible. As his therapist, you're tasked with finding the number of intrusions in a given set of numbers.

An intrusion occurs when the index of an element in the given set is different from its index in the sorted version. The value of the intrusion is calculated by adding the number of elements that are greater than the current element and preceding it.

INPUT :

The first line contains a single integer **N** ($1 \leq N \leq 10^4$) , the number of elements in the set.

The second line contains the elements of the set $A_0\ A_1 A_2\ A_3 \ldots A_{N-1} (0 < A_i < 10^5)$.

OUTPUT :

Print the total number of intrusions.

EXEMPLES :

INPUT :

5

2 3 4 5 1

OUTPUT :

4

INPUT :

5

12 9 5 3 2

OUTPUT :

10

INPUT :

8

7 2 5 1 4 6 7 3

OUTPUT :

3