Problem I. I

Time limit 1000 ms
Mem limit 65536 kB

Determine how many exchange operations are done in bubble sort algorithm to sort the elements of array in ascending order.

Input

The first line contains the number of elements **n** (**1 ≤ n ≤ 1000**) in array. The second line contains the array itself. It is guaranteed that all array elements are different and do not exceed 10^9 by absolute value.

Output

Print the number of swaps in bubble sort.

Sample 1

Input	Output
3 1 3 2	1

Sample 2

Input	Output
2 2 1	1

Sample 3

Input	Output
4 4 1 5 3	3