How many inversions? P80595_en

Count the number of inversions of every given sequence of n integer numbers $x_1 \ldots x_n$. Remember that an inversion is a pair of indices i and j such that $1 \le i < j \le n$ and $x_i > x_j$.

Input

Input consists of several cases, each one with n followed by the n integer numbers $x_1 \ldots x_n$. Assume $0 \le n \le 50000$.

Output

For every case, print the number of inversions of the sequence.

Sample input

```
4    2  3  5  7
4    7  5  3  2
3    -7  -7  -7
```

Sample output

```
0
6
0
```

Problem information

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