Problem J. Swappable

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

Given an array of N integers $A = (A_1, A_2, ..., A_N)$, find the number of pairs (i, j) of integers satisfying all of the following conditions:

- $1 \leq i < j \leq N$
- $A_i \neq A_j$

Constraints

- All values in input are integers.
- $2 \leq N \leq 3 \times 10^5$
- $1 \leq A_i \leq 10^9$

Input

Input is given from Standard Input in the following format:

N
A_1 A_2 $\ldots$ A_N

Output

Print the answer as an integer.

Sample 1

Input	Output
3 1 7 1	2

In this input, we have $A = (1, 7, 1)$.

- For the pair $(1, 2)$, $A_1 \neq A_2$.
- For the pair $(1, 3)$, $A_1 = A_3$.
- For the pair $(2, 3)$, $A_2 \neq A_3$.

Sample 2

Input	Output
10 1 10 100 1000 10000 100000 1000000 10000000 100000000 1000000000	45

Sample 3

Input	Output
20 7 8 1 1 4 9 9 6 8 2 4 1 1 9 5 5 5 3 6 4	173