

Sherlock and Pairs



Problem Statement

Sherlock is given an array of N integers ($A_0, A_1 \dots A_{N-1}$) by Watson. Now Watson asks Sherlock how many different pairs of indices i and j exist such that i is not equal to j but A_i is equal to A_j .

That is, Sherlock has to count the total number of pairs of indices (i, j) where $A_i = A_j$ AND $i \neq j$.

Input Format

The first line contains T , the number of test cases. T test cases follow.

Each test case consists of two lines; the first line contains an integer N , the size of array, while the next line contains N space separated integers.

Output Format

For each test case, print the required answer on a different line.

Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 10^5$$

$$1 \leq A[i] \leq 10^6$$

Sample input

```
2
3
1 2 3
3
1 1 2
```

Sample output

```
0
2
```

Explanation

In the first test case, no two pair of indices exist which satisfy the given condition.

In the second test case as $A[0] = A[1] = 1$, the pairs of indices $(0, 1)$ and $(1, 0)$ satisfy the given condition.