# Problem G. Generator strings

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|---|---|
| Source file name: | `G.c, G.cpp, G.java, G.py2, G.py3` |
| Input: | `Standard` |
| Output: | `Standard` |
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A string $S$ of lower case characters is said to be a generator string of the string $S'$ if $S'$ has the same length of $S$ and if each character that appears on $S$ appears the same amount of times on $S'$.

As you can see the this definition leads that $S$ is a generator string of $S$, also if $S$ is a generator string of $S'$ then $S'$ is also a generator string of $S$.

Your task is given a list of $N$ strings to determine how many pairs of indexes ($A$, $B$) you can take such that the $A-th$ element of the list is a generator of the $B-th$ element?

## Input

The input consists of several test cases. The first line of input contains a number $T$ the number of test cases. Each test case starts with a line containing a single integer $N$, followed by $N$ lines where each line contains a string from the list, each string contains only lower case characters.

- $1 \leq N \leq 10^5$
- The length of a string $L$ is in the range $1 \leq L \leq 100$

## Output

For each test case your program should print an integer number, the number of pairs ($A$, $B$) that suffices the requirements listed above.

## Example

| Input | Output |
|---|---|
| 2<br>3<br>abc<br>bca<br>cab<br>5<br>abc<br>ab<br>a<br>b<br>b | 9<br>7 |