

Sherlock and Anagrams



Given a string S , find the number of "unordered anagrammatic pairs" of substrings. In other words, find the number of *unordered* pairs of substrings of S that are anagrams of each other.

Two strings are **anagrams** of each other if the letters of one string can be rearranged to form the other string.

Input Format

First line contains T , the number of testcases. Each testcase consists of string S in one line.

Constraints

$$1 \leq T \leq 10$$

$$2 \leq \text{length}(S) \leq 100$$

String S contains only the lowercase letters of the English alphabet.

Output Format

For each testcase, print the required answer in one line.

Sample Input#00

```
2
abba
abcd
```

Sample Output#00

```
4
0
```

Sample Input#01

```
5
ifailuhkqq
hucpoltgty
ovarjsnrbf
pvmupwjijf
iwwhrlkpek
```

Sample Output#01

```
3
2
2
6
3
```

Explanation

Sample00

Let's say $S[i, j]$ denotes the substring S_i, S_{i+1}, \dots, S_j .

testcase 1:

For $S = \text{abba}$, anagrammatic pairs are: $\{S[1, 1], S[4, 4]\}$, $\{S[1, 2], S[3, 4]\}$, $\{S[2, 2], S[3, 3]\}$ and $\{S[1, 3], S[2, 4]\}$.

testcase 2:

No anagrammatic pairs.

Sample01

Left as an exercise to you.