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

$1 \leq T \leq 10$
$2 \leq length(S) \leq 100$
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
pvmupwjjjf
iwwhrlkpek
```

Sample Output#01

```
3
2
2
6
3
```

Explanation

Sample00
Let's say $S[i, j]$ denotes the substring $S_i, S_{i+1}, \cdots, S_j$.

testcase 1:
For S= abba , anagrammatic pairs are: $\{S[1, 1], S[4, 4]\}$ (a and a), $\{S[1, 2], S[3, 4]\}$ (ab and ba), $\{S[2, 2], S[3, 3]\}$ (b and b) and $\{S[1, 3], S[2, 4]\}$ (ab and ba).

testcase 2:

No anagrammatic pairs.

Sample01
Left as an exercise to you.