

# Sherlock and Anagrams

Given a string  $S$ , find the number of "unordered anagrammatic pairs" of substrings.

## 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
pvmupwjfff
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.