

COCI '13 Contest 6 #2 Font

Time limit: 1.0s **Memory limit:** 32M

Little Ivica got himself a summer job at a company that produces computer fonts. The branch of the company where Ivica works at specialises in testing computer fonts and Ivica's team is responsible for testing **only lowercase letters of the English alphabet**.

The letters are tested so that various sentences using those letters are printed out and then manually (more accurately, visually) checked if everything is arranged properly. Only sentences which contain **all 26 lowercase letters of the English alphabet (a-z)** are used for testing purposes. These sentences are called **test sentences**.

You've probably already assumed that Ivica's job is to find test sentences. He has a dictionary which consists of N words and has to calculate how many different test sentences can be made out of those words. Every word from the dictionary can be used only once in the sentence and the order of the words in the sentence is irrelevant (i.e. `uvijek jedem sarmu` and `jedem sarmu uvijek` are equal sentences).

Input Specification

The first line of input contains the integer N ($1 \leq N \leq 25$), the number of words in the dictionary.

Each of the following N lines contains a single word from the dictionary, its length not exceeding 100. All the words from the dictionary are going to be **unique**.

Output Specification

The first and only line of output must contain the required number from the task.

Sample Input 1

```
9
the
quick
brown
fox
jumps
over
a
sleazy
dog
```

Sample Output 1

2

Explanation for Sample Output 1

All words but the word `a` must be used in the test sentence because each word contains a letter that cannot be found in any other word. Therefore, there are two possible solutions. The first one being the sentence which consists of all the words and the second one being the sentence which consists of all the words apart from the word `a`.

Sample Input 2

3
a
b
c

Sample Output 2

0

Sample Input 3

15
abcdefghijkl
bcdefghijklm
cdefghijklmn
defghijklmno
efghijklmnop
fghijklmnopq
ghijklmnopqr
hijklmnopqrs
ijklmnopqrst
jklmnopqrstu
klmnopqrstuv
lmnopqrstuvw
mnopqrstuvwx
nopqrstuvwxy
opqrstuvwxyz

Sample Output 3

8189

Explanation for Sample Output 3

Given that the example is long, we stress that all the words from the example consist of consecutive letters of the English alphabet.