

# Mr. Anaga

**Problem ID:** utah.anagram**CPU Time limit:** 4 seconds**Memory limit:** 1024 MB

Your boss, Mr. Anaga, is a constructor of word puzzles who is always giving you unusual problems to solve. Today he has given you a list of words and asked you to determine how many of the words are not anagrams of any other words on the list.

For example, suppose that the list he gives you is

```
me
em
to
```

You would need to tell him “1”, because “me” and “em” are anagrams of one another, leaving only “to”. Or suppose that the list he gives you is

```
tape
rate
seat
pate
east
pest
```

You would need to tell him “2”, because “tape”/“pate” and “seat”/“east” are anagrams, leaving only “rate” and “pest”.

## Input

The first line contains integers  $n$  and  $k$  separated by a space, where  $1 \leq n \leq 10000$  and  $1 \leq k \leq 1000$ . The  $n$  words, one to a line, follow. Each word contains exactly  $k$  lower case letters. (The words are not necessarily in any dictionary you’ve ever seen.)

## Output

Produce a single line of output that contains the number of words on the list that are not anagrams of any other words on the list. This number, of course, should be between 0 and  $n$  inclusive.

### Sample Input 1

```
3 2
me
em
to
```

### Sample Output 1

```
1
```

### Sample Input 2

```
6 4
tape
rate
seat
pate
east
pest
```

### Sample Output 2

```
2
```