Problem H
Vocabulary

Source file name: `vocabulary.c,` `vocabulary.cpp` *or* `vocabulary.java`

Jack and Jill were arguing about which one of them had the richest vocabulary. Because neither one of them gave up, Jill proposed a game to test Jack's vocabulary:

- Jill would write down a list of strings, each one of them called a *challenge.*
- A challenge s in Jill's list is *solved* by Jack if he could say a word w from his vocabulary, such that every letter occurs in w with at least the same multiplicity that occurs in s. Two different challenges may be not solved with the same word.

Jack's vocabulary is defined as the set of words he knows. Given a list of Jill's challenges, Jack would like to know how many of them he can solve.

Input

There are several cases to solve. Each case begins with a line containing blank-separated numbers V and C: the former is the number of words in Jack's vocabulary ($1 \leq V \leq 500$) and the latter is the number of challenges presented by Jill ($1 \leq C \leq 500$). Each one of the next V lines contains a word in Jack's vocabulary. Then, each one of the next C lines contains a challenge made by Jill. Both, the words in Jack's vocabulary and the challenges made by Jill, consist of 1 to 30 lowercase English letters (`a`...`z`). Jack's vocabulary does not contain duplicate words.

The input must be read from standard input.

Output

For each test case, print the maximum number of challenges that Jack can solve.

The output must be written to standard output.

Sample input	Output for the sample input
1 1	1
icpc	2
pic	
4 3	
sequoia	
march	
may	
tree	
ae	
aeiou	
acm	