Find a Word

A word is defined as a set of characters; alphabets (lower case and upper case) and numbers (0-9) both included and an underscore '_' (ascii value 95). Given a series of sentences each of which contains valid ascii characters, find the total number of occurrences of a given word.

So, a word as a whole will be surrounded by 1 or more occurrences of characters which are neither alphabets, numbers or an underscore.

```
<non-letter, non-number or non-underscore ><letters, numbers or underscores><non-letter, non-number or non-underscore>
```

Input Format

The first line is an integer N. N lines follow. Each line is a sentence as per the definition given in the introductory paragraph.
The N_{th} sentence is immediately followed by an integer T. T lines follow, with the tests. Each line has a word. You need to find the total number of occurrences of this word in the given sentences.

Constraints

1 <= N <= 100
1 <= T <= 10

Output format

For every word, print the number of occurrences of the word in all the N sentences listed.

Sample Input

```
1
foo bar (foo) bar foo-bar foo_bar foo'bar bar-foo bar, foo.
1
foo
```

Sample Output

```
6
```

Explanation

- foo is the first word
- (foo) has non ascii '()' surrounding it and is the second word.
- foo-bar are considered two words and has 'foo' in it; foo is followed by non-letter, non-underscore '-' (hyphen, minus)
- bar-foo for the same reason mentioned above.
- foo_bar is considered a single word and hence foo in it is not counted.
- foo'bar are two words has 'foo' in it, foo is followed by a non-alphabet, non-underscore "'" apostrophe.
- foo. as it is followed by a non-alphabet '.' full stop.