

← Practice Programming Problems / Roy and Birthday

Roy and Birthday

Submissions Attempted by: 185 | Solved by: 50 | Partially Solved by: 103 | ★★★★★

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₱ June Easy Challenge

Its Roy's birthday and he is decorating his house with balloons. He has 26 different types of balloons. They are represented by [a-z].

Now Roy does not want to have few particular balloons together. Actually doesn't want to keep any of the two vowel (i.e [a,e,i,o,u]) balloons together.

So, in one arrangement no two vowels should be together. Given the strim of balloons there can be many such arrangements possible.

Help Roy in finding the number of possible arrangements.

Number of such arrangements can be quite large, so print it modulo 1000000007 ($10^9 + 7$) Also, there's a chance that no such arrangement is possible. Print "-1" in such cases (without quotes)

Input:

First line contains T, number of test cases.

Each of next T lines contains a string composed of lower case letters representing all the balloons.

Output:

For each test case print the required answer.

Constraints:

1 <= **T** <= 100

 $1 \le \text{Length of string} \le 1000000 (10^6)$

Note: Sum of string lengths over all the test cases in one file does not exceed 1000000 (10⁶)

Sample Input (Plaintext Link)

2

abe

ae

Sample Output (Plaintext Link)

2

- 1

Explanation

Test #1: Possible arrangements are [1] abe [2] eba

Test #2: There are no any arrangements possible such that any two vowels are not together. So

```
print -1.
Time Limit: 1 sec(s) for each input file.
Memory Limit: 256 MB
Source Limit: 1024 KB
Marking Scheme: Marks are awarded if any testcase passes.
Allowed languages: C, CPP, CLOJURE, CSHARP, GO, HASKELL, JAVA, JAVASCRIPT, JAVASCRIPT_NODE, LISP,
OBJECTIVEC, PASCAL, PERL, PHP, PYTHON, RUBY, R, RUST, SCALA
Problem Author: Ravi Ojha
Problem Tester: Lalit Kundu
 С
                      ▼
                            Upload file: Choose File No file chosen
                                                                                        Save
 1
    #include <stdio.h>
 2
 3
    int main()
4
5
         printf("Hello World!\n");
 6
7
         return 0;
    }
                                                                                                         4
                Compile & Test Provide custom input
  Submit
                                                                               ▶ Play Code (C)
Your Rating:
                                                                   Like Share
                                                                                 0
                                                                                       Tweet | 0
```

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Abhik Pa		1.0058	С
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Sayan Na		1.006	C++
Sayan Na		1.006	C++
Sayan Na		1.0062	C++
View All			

TRENDING NOTES

Number Theory - III

written by Boris Sokolov

Exact String Matching Algorithms

written by Alei Reyes

Binary Indexed Tree or Fenwick Tree

written by Chandan Mittal

Small tricks in for loop

written by Rangeesh

Strings And String Functions

written by Vinay Singh

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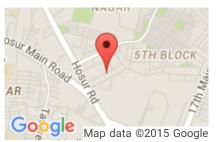
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