The contest is in progress. It ends about an hour from now.

Contests > IEEEXtreme Programming Competition 7.0 >

IEEE University Partnership Program Problem

Problem	☰ Submissions	🏆 Leaderboard	💬 Discussions

An active member of the IEEE University Partnership Program has a huge collection of model sized cars. Each car is painted in one color. He has them placed one next to the other in a line.

His friends are coming over tonight and he wants to show off his collection. He decided to remove some cars (zero or more) from the line, so that the rest of the cars create a palindrome with their colors.

Write a program that will calculate all possible ways our friend can create a palindrome.
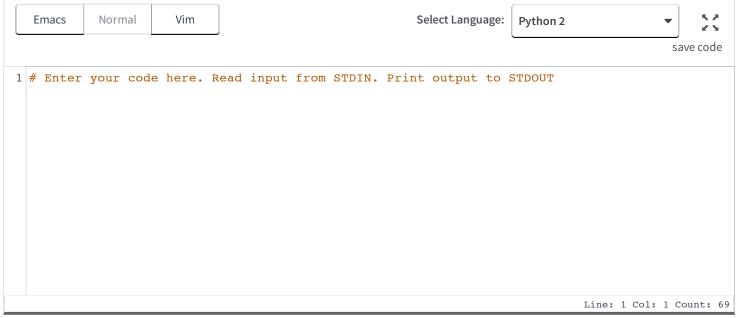
Input Data

The first line contains a number N (where 1 ? ? ? 20.000) which represents the number of cars in Vangelis's collection. The second line contains N characters. Each character is the color of a car in the collection as they appear in the line.

Output Data

The output is composed of one line. That line contains exactly one integer number, the maximum number of ways Vangelis can create a palindrome by removing (zero or more) cars from the line. Since this number can be really big, present the result of the modulo of the division of this number with the number 12.345.678.

Sample Input 1:

```
4
abcc
```

Sample Output 1:

5

Sample Input 2

4
dcec

Sample Output 2:

6

Sample Input 3:

20
XXXXXXXXXXXXXXXXXXXX

Sample Output 3:

1048575

Problem Author: IEEE

Suggest Edits

| Emacs | Normal | Vim | | Select Language: | Python 2 ▼ | ⤢ |

save code

```
1  # Enter your code here. Read input from STDIN. Print output to STDOUT
```

Line: 1 Col: 1 Count: 69

☐ **Use a custom test case**

⬆ Upload Code as File

Compile & Test   Submit Code

This is a beta version. Join us on IRC at #hackerrank on freenode for hugs or bugs.