Practice Arena

Practice problems aimed to improve your coding skills.

- PRACTICE-02_SCAN-PRINT
- PRACTICE-03_TYPES
- LAB-PRAC-02_SCAN-PRINT
- LAB-PRAC-01
- PRACTICE-04_COND
- BONUS-PRAC-02
- LAB-PRAC-03_TYPES
- PRACTICE-05_COND-LOOPS
- LAB-PRAC-04_COND
- LAB-PRAC-05_CONDLOOPS
- PRACTICE-07_LOOPS-ARR
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- LAB-PRAC-07_LOOPS-ARR
- LABEXAM-PRAC-01_MIDSEM
- PRACTICE-09_PTR-MAT
- LAB-PRAC-08_ARR-STR
  - Il fratello di Fibonacci
  - Hidden Palindrome
  - Hush Hush Hash
  - Maximum Match
  - El secreto de sus I
  - Star Replacement
  - Stronger together
  - Rigorous and repeated redaction
  - strnrev
  - Monster and Mini Multiply
  - Clash of the Substrings
  - Personalizing Emails
- PRACTICE-10_MAT-FUN
- LAB-PRAC-09_PTR-MAT
- LAB-PRAC-10_MAT-FUN
- PRACTICE-11_FUN-PTR
- LAB-PRAC-11_FUN-PTR
- LAB-PRAC-12_FUN-STRUC
- LABEXAM-PRAC-02_ENDSEM
- LAB-PRAC-13_STRUC-NUM
- LAB-PRAC-14_SORT-MISC

El secreto de sus I

LAB-PRAC-08_ARR-STR

El secreto de sus I [20 marks]

Problem Statement
You will be given a string containing at least 1 and at most 999 characters. The string will only contain upper case English alphabets . In the first line, output the number of times the letter 'I' appears in the string. In the next line, you have to encrypt the sting in the following manner -- shift every letter in the English alphabet by the number of times the letter 'I' appeared.

For example, if the letter 'I' appears twice in the string, then we will English letters by 2, 'A' would become 'C', 'P' would become 'R', 'Z' would become 'B' etc. In the second line of your output, print the string from the first point the letter 'I' appeared in the string, but using the shifted alphabet (see an example below). If the letter 'I' does not appear in the original string at all, in the second line of the output, just print the original string again.

P.S. The name of this problem literally translates from Spanish to "The secret in their I" since in this problem the secret shift does lie in the letter I. The name is a play on the title of an Oscar-winning Argentinian crime drama called "El secreto de sus ojos" (The secret in their eyes).

Caution: Be careful about extra/missing lines and extra/missing spaces in your output.

HINTS:

1. You may want to use the strlen function by including string.h. The function tells you the length of a string (number of characters uptil but not including the first NULL character).
2. The strcpy function copies one string to another and may come in handy.
3. The strchr function in string.h may help you as well. It returns a pointer to the first occurrence of a given character in a string. If you feed that pointer into printf while using the %s format specifier, the string gets printed from that point onward. For example,
printf("%s",strchr("Hello",'e')); will print "ello" without the quotes.

EXAMPLE 1:
INPUT:
NOCHANGE

OUTPUT:
0
NOCHANGE

EXAMPLE 2:
INPUT:
ABCDIABCDI

OUTPUT:
2
KCDEFK

Grading Scheme:
Total marks: **[20 Points]**

There will be partial grading in this question. There are two lines in your output. Printing each line correctly, in the correct order, carries some weightage. The first line carries 25% weightage and the second line carries 75% weightage. Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible and 4 hidden test cases.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if all parts of your answer are correct. Thus, if your answer is only partly correct, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get partial marks.

Start Solving! (/editor/practice/6167)