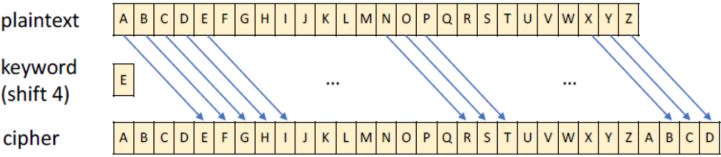


(10%) Vigenere Cipher (b)

Description

The Vigenere cipher is a method of encrypting alphabetic text based on the letters of a keyword. To explain how it works, assume that the plaintext to be encrypted is HELLO and the keyword is KEY. First, the keyword is repeated until it matches the length of the plaintext. (In this example, the keyword becomes KEYKE.) Then, each letter of the plaintext is replaced by a right-shifted letter based on the corresponding letter of the keyword: 'A' performs a right shift of 0, 'B' of 1, 'C' of 2, ... and 'Z' of 25 letters. (A right shift of 'Z' of 1 letter yields 'A'.) In the aforementioned example, HELLO is encrypted as RIJVS since 'K' (in KEY) shifts 'H' (in HELLO) 10 letters to become 'R' and 'E' (in KEY) shifts 'E' (in HELLO) 4 letters to 'I' as the following figure shows.



(b) Assuming that the plaintext and keyword are specified as words of English letters (atmost 100 letters each) that can be in upper and/or lower cases. Write a program that accepts such plaintext and keyword (e.g. Hello Key), transforms the input to upper cases (e.g. HELLO KEY), and then outputs the encrypted word (cipher) using the Vigenere cipher as mentioned above (e.g. RIJVS).

Input

Two words separated by white space.

Output

A word of Vigenere Cipher encrypting result.

Sample Input 1

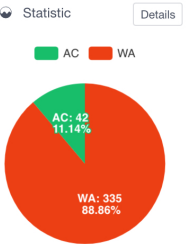
Hello Key

Sample Output 1

RIJVS

- Problems
- Announcements
- Submissions
- Rankings
- View Contest

Information	
ID	2b
Time Limit	20MS
Memory Limit	64MB
Created By	hungguo
Level	Low
Score	10
Tags	Show



Language: C++ Theme: Solarized Light

```
1
```

You have solved the problem

Contest has ended

Submit