

Security - Message Space and Ciphertext Space

Problem Statement

To understand what *Message Spaces* and *Cipher Space*, one needs to first know about *alphabet of definition*.

A denotes a finite set called the *alphabet of definition*. For example, $A = \{0, 1\}$ is the *binary alphabet*, is a frequently used alphabet of definition.

M denotes a set called *message space*. M consists of strings composed of symbols from an alphabet of definition.

C denotes a set called the *ciphertext space*. C consists of strings composed of symbols from an alphabet of definition which might or might not differ from that of M .

For example, consider the following encryption - You get a message composed of lowercase latin characters only. For any letter in the message, you shift it one time and create a new message which you transmit i.e. if you get "abz" then you transform it to "bca". Here, A is $\{'a', 'b', 'c', \dots, 'z'\}$.

And both C and M are set of all strings composed of lowercase latin characters.

like,

$\{abc, degg, fe, \dots\} \in M$

and

$\{bcd, efhh, gf, \dots\} \in C$ (corresponding to the strings of M)

As you can see, for every possible string in M , there is a string in C .

In this task, your alphabet of definition is $A = \{0, 1, 2, \dots, 9\}$. M and C are both the set of all strings consisting of decimal digits. Given a message, you need to find what message you obtain if you shift each digit in the message string (1 to the right and cyclic).

CONSTRAINTS:

$1 \leq \text{Length of the string} \leq 10$

Input Format

Input consists of a single line which contains the string.

Output Format

Output a single line, the shifted string.

Sample Input

982

Sample Output

