

Cipher

Because having a problem statement is too mainstream...:P

Hint: Observe the sample input and output

Input

Contains few test cases with each test case containing a string in a separate line. String will consist of lowercase alphabets. ('a'-'z') only and $\text{strlen}(\text{string}) \leq 500$

For taking input read till EOF.

An example of how to read strings till EOF:

```
while(gets(string))
{
    /*process string*/
}
```

Score is the length of your code. (Smaller the code length, better the score)

Output

For each test case output a single string containing the answer

Example

Input:

lolo

whoami

Output:

oror

zkrdpl