

Rot-13

ROT13 is a simple encryption method. It shifts each character of the clear text string 13 positions forward in the alphabet.

Your task is to write a simple function that, given as input a string, returns the encoded ROT13 string.

Input

The first line of input contains a string.

Output

The first line displays the string encoded in ROT13 code.

Sample input

Sample output

hello	uryyb
gamification	tnzvsvpngvba
flower	sybjre