





Better Passwords

Byang is creating an account on Toph. He needs your help to create a strong password. Byang will give you a word, and you will need to make the following changes to the word to

make it a stronger password:

- Make the first character an uppercase
- Replace all s with \$
- Replace all i with !
- Replace all o with ()
- Append a . (period) at the end of the password

Input

The input will contain a string A (0 < Length of A < 16). A will contain lowercase alphabets only.

Output

Print the better password after applying all the necessary changes to the original word A.

Input	Output
unsophisticated	Un\$()ph!\$t!cated.