Conversion

Input file: standard input
Output file: standard output

Time limit: 2 seconds
Memory limit: 64 megabytes

Given a string S. Print the **origin** string after replacing the following:

• Replace every **comma** character ',' with a space character.

• Replace every capital character in S with its respective small character and Vice Versa.

Input

Only one line contains a string S ($1 \le |S| \le 10^5$) where |S| is the length of the string and it consists of **lower** and **upper** English letters and **comma** character ','.

Output

Print the string after the **conversion**.

Example

standard input	standard output
happy,NewYear,enjoy	HAPPY nEWyEAR ENJOY