

H. Alternating case

time limit per test: 3 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

You are given a string consisting of alphabet letters. Convert it to alternating case: the letters on odd positions should be in uppercase, and the letters on even positions should be lowercase. The letters are numbered starting from 1.

Input

The only line of input contains a string between 1 and 100 characters long. Each character of the string is either an uppercase ('A'-'Z') or a lowercase ('a'-'z') letter.

Output

Output the resulting string.

Examples

input
Codeforces
output
CoDeFoRcEs

input
VKCup
output
VkCuP