

B. String inside out

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

You are given a string S of even length $s_1..s_{2n}$. Perform the following manipulations:

- divide it into two halves $s_1..s_n$ and $s_{n+1}..s_{2n}$
- reverse each of them $s_n..s_1$ and $s_{2n}..s_{n+1}$
- concatenate the resulting strings into $s_n..s_1s_{2n}..s_{n+1}$

Output the result of these manipulations.

Input

The only line of the input contains a string of lowercase Latin letters. The length of the string is between 2 and 20, inclusive, and it is even.

Output

Output the string which is the result of the described manipulations.

Examples

input
codeforces
output
fedocsecro

input
qwertyasdfgh
output
ytrewqhgfdsa