

License to Hack (150 points)

Introduction

MI6 and CIA have been trying to intercept terrorist communications, but found that all their messages are transmitted in a very cryptic way. 007 was called to the rescue to crack the code. 007 has figured out the algorithm the terrorists have used to encode the message, but needs our help to code in the reverse and find the actual message from the encryption.

The encoding Algorithm figured out by 007 is as follows:

Given a message of any length and a positive integer N, reverse N characters and skip N characters until the end of the string to generate the encrypted message.

Input Specifications

There are 2 lines of input. The first line is the encrypted message string, which has valid ASCII characters. The second line is a positive integer N.

Output Specifications

The output is the decrypted message.

Sample Input/Output

Input

This should be easy!

Output

This should be easy!

Explanation

If you exchange every letter with itself, the sentence is unaltered.

Input

ihTs suohld ebeas!y
3

Output

This should be easy!

Explanation

"ihT" -> "Thi", "s s" stays the same, "uoh" -> "hou", and so on

Input

!ysae eb dluohs sihT 30

Output

This should be easy!

Explanation

30 is larger than the length of the input string, 20, so the output is just the reverse