



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. Ultra-Fast Mathematician

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

Shapur was an extremely gifted student. He was great at everything including Combinatorics, Algebra, Number Theory, Geometry, Calculus, etc. He was not only smart but extraordinarily fast! He could manage to sum 10^{18} numbers in a single second.

One day in 230 AD Shapur was trying to find out if any one can possibly do calculations faster than him. As a result he made a very great contest and asked every one to come and take part.

In his contest he gave the contestants many different pairs of numbers. Each number is made from digits 0 or 1. The contestants should write a new number corresponding to the given pair of numbers. The rule is simple: The i-th digit of the answer is 1 if and only if the i-th digit of the two given numbers differ. In the other case the i-th digit of the answer is 0.

Shapur made many numbers and first tried his own speed. He saw that he can perform these operations on numbers of length ∞ (length of a number is number of digits in it) in a glance! He always gives correct answers so he expects the contestants to give correct answers, too. He is a good fellow so he won't give anyone very big numbers and he always gives one person numbers of same length.

Now you are going to take part in Shapur's contest. See if you are faster and more accurate.

Input

There are two lines in each input. Each of them contains a single number. It is guaranteed that the numbers are made from 0 and 1 only and that their length is same. The numbers may start with 0. The length of each number doesn't exceed 100.

Output

Write one line — the corresponding answer. Do not omit the leading 0s.

Examples

input	Сору
1010100 0100101	
output	Сору
1110001	

input	Сору
000	
111	
output	Сору
111	

input	Сору
1110 1010	
output	Сору

Codeforces Beta Round #57 (Div. 2). Finished Practice

→ Virtual participation

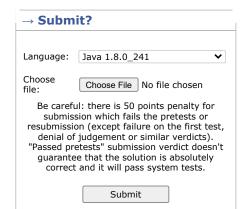
Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest





0100	
input	Сору
01110 01100	
output	Сору
00010	

•	Announcement (oth)	×
•	Tutorial #1 (en)	×
•	Tutorial #2 (en)	×
•	Tutorial #3 (en)	×
•	Tutorial #4 (en)	×
•	Tutorial #5 (en)	×

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