Mirko likes to play with strings of characters, but this time he has taken it too far – he put an "explosion" in the string! An explosion is a series of characters which, if found in the vicinity of fire, explodes and starts a chain reaction.

Mirko, being as negligent as he usually is, forgot that his string contained an explosion and placed it near a candlelight. Thus the chain reaction began.

The chain reaction takes place in the following way:

- if a string contains explosions, they **all** explode and a new string is formed by concatenating the pieces **without** the exploding parts
- this concatenation could possibly create new explosions
- the chain reaction repeats while there are explosions in the string

Now Mirko wants to know whether anything will be left after this series of chain reactions. If **nothing** remains, output "FRULA" (without quotes). If, by any chance, **something** is left, output the final string remaining after all the reactions.

Please note: The explosion will not contain two equal characters.

INPUT

The first line of input contains **Mirko's string**, ($1 \leq |$**Mirko's string**$| \leq 1\,000\,000$).

The second line of input contains **the explosion string**, ($1 \leq |$**explosion**$| \leq 36$).

Both Mirko's string and the explosion string consist of uppercase and lowercase letters of the English alphabet and digits 0, 1, … 9.

OUTPUT

The first and only line of output must contain the final string remaining after all the reactions as stated in the task.

SCORING

In test cases worth 50% of total points, **N** will not exceed 3000.

SAMPLE TESTS

input	**input**
mirkovC4nizCC44 C4	12ab112ab2ab 12ab
output	**output**
mirkovniz	FRULA

Clarification of the second example: Firstly, the bombs on positions 1 and 6 explode. Then we are left with ****1****2ab (where * marks the character that exploded) and when that string is put together, we get 12ab. Sadly, that is an explosion all over again so it disappears.