#### Time limit: 1.0s Memory limit: 32M

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**. 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 Specification**

```
The first line of input contains Mirko's string, (1 \le |Mirko's string| \le 1\,000\,000).
```

```
The second line of input contains the explosion string, (1 \le |explosion| \le 36).
```

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

# **Output Specification**

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  $3\,000.$ 

# Sample Input 1

mirkovC4nizCC44 C4

# Sample Output 1

mirkovniz

# Sample Input 2

12ab112ab2ab 12ab

# Sample Output 2

FRULA

## **Explanation of Sample Output 2**

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.