

## Problem 3. Nick's Charity

After a fundraiser party, Nick wants to find out how much money he has raised for his charity. He received an encrypted message with the amount collected. Your task is to help Nick to figure out how much money he has collected.

For the First input, you will **receive a string**. The Second input will be a list of commands.

You will receive **commands** to help you with "decrypting" the message from the charity. Keep decrypting the message until you get the **"Finish"** command.

- **"Replace {currentChar} {newChar}"**
  - Replace **all** occurrences of {currentChar} with {newChar}, then **print** the **current message**.
- **"Cut {startIndex} {endIndex}"**
  - **Remove** the substring from the {startIndex} until the {endIndex}, then **print** the **current message**.
  - If either of the indexes is not valid, **print**:  
**"Invalid indexes!"**
- **"Make {Upper/Lower}"**
  - **Replace** all letters with **upper/lower** case and **print** the **current message**
- **"Check" {string}**
  - **Check** if the message contains the given string.
    - If it does, **print**: **"Message contains {string}"**
    - If it doesn't, **print**: **"Message doesn't contain {string}"**
- **"Sum {startIndex} {endIndex}"**
  - Get the **substring** from {startIndex} to {endIndex} and **print** the **sum of the ASCII values of the substring**.
  - If any of the {startIndex} or {endIndex} are invalid, **print**:  
**"Invalid indexes!"**

**Note:** At any time, the message will contain at least one character.

## Input

- First input you will receive the **string** with the encrypted message.
- The next input will be **lines of commands**, which you will execute until you receive **"Finish"** command.

## Output

- **Print** the **output** of every **command** in the **format described above**.

## Constraints

- The **indexes** will be integers in the range [-50...50]

## Examples

Input	Output
<code>`ILikeSharan`, [`Replace a e`, `Make Upper`, `Check SHEREN`, `Sum 1 4`, `Cut 1 4`, `Finish`]</code>	<code>ILikeSheren ILIKESHEREN Message contains SHEREN 293 ISHEREN</code>
Input	Output
<code>`HappyNameDay`, [`Replace p r`, `Make Lower`, `Cut 2 23`, `Sum -2 2`, `Finish`]</code>	<code>HarryNameDay harrynameday Invalid indexes! Invalid indexes!</code>