

# 25 Juno's calculator

15 points



## Introduction

The roman goddess Juno is the protector and special counselor of the state. She needs to manage the state accounting, but she is very busy, and she asks you to help her.

Could you write a program that quickly calculates mathematical operations? There are no parentheses, priorities or operator associativity, the operations must be done in the order they are read. Remember that Juno only knows Roman Numerals, so you will have to do some translating!

## Input

An undetermined amount of pairs of lines. The first line from each pair is a Roman Number, the second one is a mathematical operation ("+", "-", "\*", "/", "%", "="). Note that:

- "/" is the integer division operator
- "%" is the modulo operator that finds the remainder after division of one number by another
- "=" is only allowed once at the end of the input

## Output

The result of the series of operations in the order they are read. The output must be written in roman numbers. The result will be always greater than 0 and less than 4000

### Example 1

#### Input

I  
+  
II  
+  
IV  
+  
VI  
=

#### Output

XIII

### Example 2

#### Input

I  
+  
II  
+  
IV  
+  
VI  
\*  
II  
=

#### Output

XXVI

### Example 3

#### Input

I  
+  
II  
+  
IV  
+  
VI  
-  
XII  
=

#### Output

I

### Example 4

#### Input

I  
+  
II  
+  
IV  
+  
VI  
/  
II  
=

#### Output

VI

### Example 5

#### Input

I  
+  
II  
+  
IV  
+  
VI  
%  
X  
=

#### Output

III