

**14**

## Ave, Caesar!

9 points

### Introduction

Julius Caesar is visiting us from the past and he is giving us instructions to build a time machine like his. Our engineers are finding that his instructions include numbers written in Roman. Your task is to write a program that helps them understand these numbers.

As you should already know, Romans used a different numbering system, based on letters and their position. Certain numbers had an assigned letter and the basic rules are:

- If a smaller letter comes afterwards, it adds
- If a smaller letter comes beforehand, it subtracts

Basic characters are:

I is 1

V is 5

X is 10

L is 50

C is 100

D is 500

M is 1000

For instance, in XI the I adds its value to the X because it comes after, so it means 11. In IX the I subtracts its value from the X because it comes before, so it means 9.

### Input

The input of the program is a set of Roman numbers ending with a zero. Mmmm, wait! Romans did not have a zero!!! So let's use a dot (.) for the end. The maximum number is 3999 and the longest sequence is the one that produces number 3888 (MMMDCCLXXXVIII).

VII  
XLIX  
CXX  
MCMXCII  
MMMDCCLXXXVIII  
MMXV  
.

### Output

The program must output the corresponding Arabic numbers.

7  
49  
120  
1992  
3888  
2015