Background

Roman numerals are expressed with letters of the alphabet:

Roman Numeral	Integer
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

There are four basic principles for reading and writing Roman numerals:

- Re-occurences of a letter repeats the value that many times (XXX = 30, CC = 200, etc.). A letter can only be repeated three times.
- If one or more letters are placed after another letter of greater value, add that amount.
  - VI = 5 + 1 = 6
  - LXX = 50 + 10 + 10 = 70
  - MCC = 1000 + 100 + 100 = 1200
- If a letter is placed before another letter of greater value, subtract that amount.
  - IV = 5 – 1 = 4
  - XC = 100 – 10 = 90
  - CM = 1000 – 100 = 900
- Several rules apply for subtracting amounts from Roman numerals:
  - Only subtract powers of ten (I, X, or C, but not V or L)
    - VC and XVC are not valid
  - Only subtract one number from another
    - IIXV is not valid
  - Do not subtract a number from one that is more than 10 times greater (that is, you can subtract 1 from 10 [IX] but not 1 from 20—there is no such number as IXX.)
    - IC is not valid

Assignment

Write a program that accepts roman numerals and outputs the correct numeric value