

Roman Numerals

prob: ROMAN

Roman numerals are an ancient numbering system. If you are unfamiliar with roman numerals, refer to the sheet at the back of the problem set. The Problem: Add two roman numerals, expressing the result in roman numerals.

The Input:

Several pairs of roman numerals. Only the capital letters **I, V, X, L, C, D** and **M** will be used. Each roman numeral will be on a separate line, starting in column one. The roman numerals and their sums are guaranteed to be within the range of 1 to 3999, inclusive.

The Output:

For each pair of roman numerals, print the sum, expressed in roman numerals. (Capital letters only, please.)

Sample Input:

III
VI
XXIII
XXVII
MCMLXXXIV
DXIV

Sample Output:

IX
L
MMCDXCVIII