

2. round, 21. november 2009.

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Using roman numerals the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9 are written as 'I', 'II', 'III', 'IV', 'V', 'VI', 'VII', 'VIII', 'IX'. Numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 are written as 'X', 'XX', 'XXX', 'XL', 'L', 'LX', 'LXX', 'LXXX', 'XC'.

Any number smaller than 100 can be written by converting tens and ones separately and concatenating the results. So, for example, the number 48 would be written as XLVIII, XL for 40 and VIII for 8.

Given a number written in roman numerals, rearrange it's characters so that you create the smallest possible number, written in roman numerals.

INPUT

The first and only line of input contains one integer **B** ($1 \leq \mathbf{B} < 100$), written using roman numerals.

OUTPUT

The first and only line of output should contain a rearrangement of input characters so that it represents the smallest possible number, written in roman numerals.

SAMPLE TESTS

input	input	input
VII	VI	III
output	output	output
VII	IV	III