Integer to Roman - LeetCode 2018-04-30, 3:01 PM

# 12. Integer to Roman



Medium

141.4K

305.2K

LeetCode

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Roman numerals are represented by seven different symbols: I, V, X, L, C, D and M.

| Symbol | Value |
|--------|-------|
| I      | 1     |
| V      | 5     |
| X      | 10    |
| L      | 50    |
| С      | 100   |
| D      | 500   |
| М      | 1000  |

For example, two is written as II in Roman numeral, just two one's added together. Twelve is written as, XII, which is simply X + II. The number twenty seven is written as XXVII, which is XX + V + II.

Roman numerals are usually written largest to smallest from left to right. However, the numeral for four is not IIII . Instead, the number four is written as IV . Because the one is before the five we subtract it making four. The same principle applies to the number nine, which is written as IX . There are six instances where subtraction is used:

- I can be placed before V (5) and X (10) to make 4 and 9.
- X can be placed before L (50) and C (100) to make 40 and 90.
- C can be placed before D (500) and M (1000) to make 400 and 900.

Given an integer, convert it to a roman numeral. Input is guaranteed to be within the range from 1 to 3999.

#### Example 1:

Input: 3
Output: "III"

### Example 2:

Input: 4
Output: "IV"

#### Example 3:

Input: 9
Output: "IX"

#### Example 4:

Input: 58
Output: "LVIII"
Explanation: C = 100, L = 50, XXX = 30 and III = 3.

## Example 5:

Input: 1994
Output: "MCMXCIV"
Explanation: M = 1000, CM = 900, XC = 90 and IV = 4.

Seen this question in a real interview before? Yes No

Notes