

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

| Symbol | Value |
|--------|-------|
| I | 1 |
| V | 5 |
| Χ | 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"