*Integer to Roman*

Given an integer, convert it to a roman numeral. The specific operations need to take reference in the Roman to Integer. 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’

*Example 5:*

Input: 1994

Output: ‘MCMXCIV’

class Solution {

public:

    string intToRoman(int num) {

        string roman [] = { "M", "CM", "D", "CD", "C", "XC", "L", "XL", "X", "IX", "V", "IV", "I" };

        int weight [] = { 1000, 900, 500, 400, 100, 90, 50, 40, 10, 9, 5, 4, 1 };

        string result;

        int remainder = 0;

        int divisor = 0;

        int size = 13;

        for ( int i = 0; i < 13 ; i ++ ) {

            divisor = num / weight[i];

            if ( divisor != 0 ) {

                int j = divisor;

                while ( j ) {

                    result = result + roman[i];

                    j --;

                }

                remainder = num - divisor \* weight[i];

                num = remainder;

            }

            if ( num == 0 ) {

                break;

            }

        }

        return result;

    }

};