**HARDIK KHARE | 70765344**

**HW 7.1 - Roman Numeral Converter (50 pts)**

Write a program that converts integers into Roman numerals and Roman numerals into integers.  We will be using the rule that no Roman numeral is to be repeated in succession more than 3 times in a roman number input, thus there will be a bound on the size of the numbers your program can process.

Your program should be efficient, both in terms of space and memory.

Input:

* a Roman numeral or Integer (via stdin)

Output:

* the corresponding converted form if possible (via stdout)

**Section 1: Successful compilation of programTable

Description automatically generated with low confidence**

**Section 2: program running on the provided example from the assignmentTable

Description automatically generated with low confidence**

**Section 3: Provided test input**

**Table

Description automatically generated with low confidence**

**Section 4: Edge Case #1  
Description:** Lowercase characters numerals **Input: ‘xl’**  
**Expected Output: ‘Invalid Input’**

**Table

Description automatically generated with low confidence**

**Section 5: Edge Case #2  
Description:** Alphanumeric string **Expected Output: ‘Invalid input’**

**Table

Description automatically generated with low confidence**

**Section 6: Edge Case #3  
Description:** Negative integer **Expected Output: ‘Invalid input’**

**A picture containing text

Description automatically generated**

<https://leetcode.com/problems/trapping-rain-water/>

Chart, bar chart

Description automatically generated

<https://leetcode.com/problems/count-of-smaller-numbers-after-self/>

A picture containing graphical user interface

Description automatically generated