Description | Solution | Discuss (...) | Submissi... | Python3 | Autocomplete

13. Roman to Integer

Easy 1189 94 Add to List Share

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
C	100
D	500
M	1000

For example, `2` is written as `II` in Roman numeral, just two one's added together. `12` is written as `XII`, which is simply `X + II`. The number `27` 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.

```python
class Solution:
    def romanToInt(self, s: str) -> int:
        translations = {
            "I": 1,
            "V": 5,
            "X": 10,
            "L": 50,
            "C": 100,
            "D": 500,
            "M": 1000
        }
        number = 0
        s = s.replace("IV", "IIII").replace("IX", "VIIII")
        s = s.replace("XL", "XXXX").replace("XC", "LXXXX")
        s = s.replace("CD", "CCCC").replace("CM", "DCCCC")
        for char in s:
            number += translations[char]
        return number
```

Your previous code was restored from your local storage. Reset to default

Testcase | Run Code Result | Debugger

Accepted Runtime: 51 ms

Your input: "III"

Output: 3 Diff

Expected: 3

Console | Use Example Testcases | Run Code | Submit