Problem #13: Roman to Integer ( Easy)

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<https://leetcode.com/problems/roman-to-integer/>

My Solution:

Runtime beats 93.59%.

1. Create a dictionary called dict to map roman number to integers.

2. Let n be the length of s.

3. Initialize total to 0.

4. Iterate through s array to last but one character. If the value of the character at index i from the dictionary is less than the next character, then subtract the integer value of the character at index i from total. Otherwise add the value of the character at index i from the dictionary to total.

5. Finally add the integer value of the last character in s to total.

6. Return total.

class Solution:

def romanToInt(self, s: str) -> int:

dict= { 'I': 1, 'V': 5, 'X': 10, 'L': 50, 'C': 100, 'D': 500, 'M': 1000}

n = len(s)

total = 0

for i in range(n-1):

if dict[s[i]] < dict[s[i+1]]:

total -= dict[s[i]]

else:

total += dict[s[i]]

total += dict[s[-1]]

return(total)