**Justin\_DynamicProgramming\_0303. Range Sum Query - Immutable**

**Concept:**

for 寫在 sumRange 裡執行時間會太久

先見一個 list ==> 紀錄 0 ~ K的總和 (ex: [1,2,3] ==> [1,3,6])

需要 i ~ j 的總和則可以用 (0 ~ j 的總和) - (0 ~ i-1 的總和)

# 注意 test data 為空集合

**Code:**

class NumArray:

def \_\_init\_\_(self, nums: List[int]):

self.nums = nums

self.sum\_list = []

if nums:

self.sum\_list.append(self.nums[0])

for k in range(1, len(nums)):

self.sum\_list.append(self.sum\_list[k-1] + self.nums[k])

#print(self.sum\_list)

def sumRange(self, i: int, j: int) -> int:

if i == 0:

return self.sum\_list[j]

else:

return self.sum\_list[j] - self.sum\_list[i-1]

# Your NumArray object will be instantiated and called as such:

# obj = NumArray(nums)

# param\_1 = obj.sumRange(i,j)