**Justin\_Array\_TwoPointers\_0015.docx.**  **3Sum**

**Concept:**

先固定一個點，利用兩個指標

總和太大，右邊的指標往左移動

總和太小，左邊的指標往右移動

**Code:**

class Solution:

def threeSum(self, nums: List[int]) -> List[List[int]]:

result = []

nums.sort()

for i in range(len(nums)):

if nums[i] > 0:

break

if i == 0 or nums[i - 1] != nums[i]:

self.twoSumII(nums, i, result)

return result

def twoSumII(self, nums: List[int], i: int, result: List[List[int]]):

lo, hi = i + 1, len(nums) - 1

while (lo < hi):

sum = nums[i] + nums[lo] + nums[hi]

if sum < 0 or (lo > i + 1 and nums[lo] == nums[lo - 1]):

lo += 1

elif sum > 0 or (hi < len(nums) - 1 and nums[hi] == nums[hi + 1]):

hi -= 1

else:

result.append([nums[i], nums[lo], nums[hi]])

lo += 1

hi -= 1