

* 4Sum II

num1, num2, num3, num4

↓

$$\text{num1}[i] + \text{num2}[j] + \text{num3}[k] + \text{num4}[l] = 0$$

$$O(n^2)$$

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↓

store in a map

↓

check for -value in the map

- sort all 4 arrays.

take global min,

$$\text{min} = \min \{ \text{num1}[0] + \text{num2}[0], -(\text{num3}[\text{len}] + \text{num4}[\text{len}]) \}$$

take global max,

$$\text{max} = \max \{ \text{num1}[\text{len}] + \text{num2}[\text{len}], -(\text{num3}[0] + \text{num4}[0]) \}$$

store in an array instead of map.