

454. 4Sum II

Given four integer arrays *nums1*, *nums2*, *nums3*, and *nums4* all of length *n*, return the number of tuples *(i, j, k, l)* such that:

- $0 \leq i, j, k, l < n$
- $\text{nums1}[i] + \text{nums2}[j] + \text{nums3}[k] + \text{nums4}[l] == 0$

Example 1:

- **Input:** $\text{nums1} = [1,2], \text{nums2} = [-2,-1], \text{nums3} = [-1,2], \text{nums4} = [0,2]$
- **Output:** 2
- **Explanation:**
 - *The two tuples are:*
 1. $(0, 0, 0, 1) \rightarrow \text{nums1}[0] + \text{nums2}[0] + \text{nums3}[0] + \text{nums4}[1] = 1 + (-2) + (-1) + 2 = 0$
 2. $(1, 1, 0, 0) \rightarrow \text{nums1}[1] + \text{nums2}[1] + \text{nums3}[0] + \text{nums4}[0] = 2 + (-1) + (-1) + 0 = 0$

Example 2:

- **Input:** $\text{nums1} = [0], \text{nums2} = [0], \text{nums3} = [0], \text{nums4} = [0]$
- **Output:** 1

Constraints:

- $n == \text{nums1.length}$
- $n == \text{nums2.length}$
- $n == \text{nums3.length}$
- $n == \text{nums4.length}$
- $1 \leq n \leq 200$
- $-2^{28} \leq \text{nums1}[i], \text{nums2}[i], \text{nums3}[i], \text{nums4}[i] \leq 2^{28}$