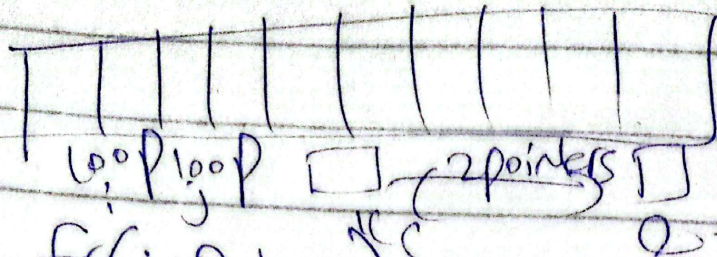


4 Sum

We have to take the group of four elements.

$$\text{nums}[i] + \text{nums}[j] + \text{nums}[k] + \text{nums}[l] = \text{target}$$



for (i = 0 to n)

for (j = i + 1 to n)

p = j + 1, q = n - 1

while (p < q)

sum = nums[i] + nums[j] + nums[p] + nums[q]

sum < target → p++

sum > target → q--

sum == target → store

p++ ; q--

Optimization

- ★ If i gets duplicate move forward.
- ★ If j gets duplicate move forward.
- ★ If p gets duplicate move forward.