## 3 Sum Closest

Two societes technique, but instead of finding a triplet that rum, to exactly of you'll track the closest sum to the target seen so fas.

Strategy Overview:

1. For the array nums.

2. Therate thisugh each element i:

eve two pointers: left = i+1, right = n-1

for each triplet nums [i]+ nums [ left]+ nums (right] check:

if sum = = target; you've found the escent anner-seture it else if also (num - target) < also (closest - target), update closest. more left a sight based on whether min c tanget a

sum Starget

3. Kettern the Colst closest sum at the end

Initialisation: The a large dummy value letse:

int closest = nums [0] + nums [1] + nums [2];

Printer Movement Zage! If sum < target - try larger sum - left++
If sum > target - try smaller sum - sight-

Time Complexity: [- Isterg: On logn]

Theo pointer loop: O(1)

Efficient enough for u < 500