class Solution:

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

nums.sort()

res = []

for i in range(len(nums) - 3):

# skip duplicate starting values

if i > 0 and nums[i] == nums[i-1]:

continue

for j in range(i+1, len(nums) - 2):

# skip duplicate starting values

if j > i + 1 and nums[j] == nums[j-1]:

continue

left, right = j + 1, len(nums) - 1

while left < right:

four\_sum = nums[i] + nums[j] + nums[left] + nums[right]

if four\_sum == target:

res.append([nums[i], nums[j], nums[left], nums[right]])

left += 1

right -= 1

while left < right and nums[left] == nums[left - 1]:

left += 1

while left < right and nums[right] == nums[right + 1]:

right -= 1

elif four\_sum < target:

left += 1

else:

right -= 1

return res