**TASK:**

Instructions: Given an array of integers, find the majority element, i.e., the element that appears more than n/2 times (where n is the size of the array). If no majority element exists, return -1.

Example Test Case:

Input: [2, 4, 5, 5, 5, 5, 5]

Output: 5

ANSWER:

def find\_majority\_element(nums):

candidate = None

count = 0

# Find potential candidate

for num in nums:

if count == 0:

candidate = num

count = 1

elif candidate == num:

count += 1

else:

count -= 1

count = 0

for num in nums:

if num == candidate:

count += 1

if count > len(nums) // 2:

return candidate

else:

return -1