def linear\_search(arr, target):

for i, roll\_number in enumerate(arr):

if roll\_number == target:

return i # Found

return -1 # Not found

def sentinel\_search(arr, target):

n = len(arr)

last\_element = arr[-1]

arr[-1] = target # Set senÆŸnel value

i = 0

while arr[i] != target:

i += 1

arr[-1] = last\_element # Restore the original last element

if i < n - 1 or arr[n - 1] == target:

return i # Found

return -1 # Not found

roll\_numbers = [101, 102, 105, 107, 109, 112, 115]

target\_roll = 107

linear\_result = linear\_search(roll\_numbers, target\_roll)

sentinel\_result = sentinel\_search(roll\_numbers, target\_roll)

if linear\_result != -1:

print(f"Linear Search: Student with roll number {target\_roll} attended the training program at index{linear\_result}")

else:

print(f"Linear Search: Student with roll number {target\_roll} did not attend the training program.")

if sentinel\_result != -1:

print(f"SenÆŸnel Search: Student with roll number {target\_roll} attended the training program at index{sentinel\_result}")

else:

print(f"SenÆŸnel Search: Student with roll number {target\_roll} did not attend the training program.")