def sentinelSearch(arr, n, key):

# Save the last element of the array

last = arr[n - 1]

# Place the key at the last index to act as the sentinel

arr[n - 1] = key

i = 0

# Iterate through the array until the key is found

while arr[i] != key:

i += 1

# Restore the original last element

arr[n - 1] = last

# Check if the key was found within the original array bounds

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

print(f"{key} is present at index {i}")

else:

print("Element not found")

# Example usage

arr = [10, 20, 180, 30, 60, 50, 110, 100, 70]

n = len(arr)

key = 180

sentinelSearch(arr, n, key)

print(“\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*linear search\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*”)

#arr = [1,25,3,5,6]

# LINEAR SEARCH

def linear\_search(lst, target):

"""Perform a linear search on a list to find a target element."""

for i in range(len(lst)):

if lst[i] == target:

print(f"{target} is present at index {i}") # This line was incorrectly placed after `return`

return i

print("Element not found") # For cases where the element isn't found

return -1

# Example usage

key\_to\_find = 10

print(linear\_search(arr, key\_to\_find))