def selectionsort(array,size):

for ind in range (size):

min\_index=ind

for j in range(ind+1,size):

if array[j]<array[min\_index]:

min\_index=j

(array[ind],array[min\_index])=(array[min\_index],array[ind])

array=[45,65,78,21,12,4]

size=len(array)

print("unsorted array",array)

result=selectionsort(array,6)

print("array after sorting in acsending order by selection sort is :",array)

print("\*\*\*\*\*\*\*\*\*\*using bubble sort\*\*\*\*\*\*\*\*\*\*\*")

# Bubble Sort

def bubbleSort(array):

n = len(array)

# Traverse through all array elements

for i in range(n):

# Last i elements are already in place

for j in range(0, n - i - 1):

# Swap if the element found is less than the next element

if array[j] < array[j + 1]:

array[j], array[j + 1] = array[j + 1], array[j]

# Display the top 5 scorers

def displayTopScorers(array):

print("Top 5 scorers:")

for i in range(min(5, len(array))): # Ensure it works even if array has less than 5 elements

print(f"Rank {i + 1}: {array[i]}")

# Data array

data = [87, 78, 34, 2, 67, 56, 45, 100, 1]

# Apply Bubble Sort

bubbleSort(data)

# Display sorted array and top 5 scorers

print('Sorted Array in Descending Order:')

print(data)

print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*")

displayTopScorers(data)