**Practical No.:-** 5

**Name:** Sattyam Sagar Chavan, AI&DS-B4 batch, Roll no: 73

**Input :-**

print("Name : Sattyam Sagar Chavan , Class : SE - AI&DS , Batch : B2 , Roll no : 73\n OUTPUT :\n")

# Function to perform Selection Sort

def selection\_sort(arr):

n = len(arr)

for i in range(n):

min\_index = i

for j in range(i + 1, n):

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

min\_index = j

arr[i], arr[min\_index] = arr[min\_index], arr[i]

return arr

def bubble\_sort(arr):

n = len(arr)

for i in range(n):

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

if arr[j] > arr[j + 1]:

arr[j], arr[j + 1] = arr[j + 1], arr[j]

return arr

def display\_top\_five(arr):

# Sorting the array in descending order to get top scores

sorted\_arr = arr[::-1]

print("Top five scores are:", sorted\_arr[:5])

def main():

# Input: First-year percentage of students

percentages=[]

print("Enter Percentages of 5 Students: ")

for i in range (0,5):

percentages.append(float(input()))

sorted\_selection = selection\_sort(percentages.copy())

print("Sorted using Selection Sort:", sorted\_selection)

display\_top\_five(sorted\_selection)

sorted\_bubble = bubble\_sort(percentages.copy())

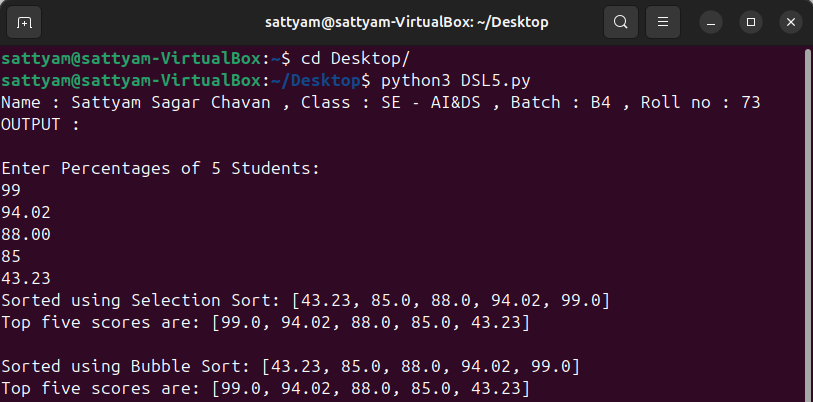
print("\nSorted using Bubble Sort:", sorted\_bubble)

display\_top\_five(sorted\_bubble)

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Output :**

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