n = int(input("Enter number of students: "))

roll = []

def enterval(roll,n):

for i in range(n):

m = int(input("Enter roll number: "))

roll.append(m)

print("Final list of students: ")

print(roll)

print()

#selection sort

def selection(roll,n):

print("$ Selection Sort $")

for i in range(n):

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

if (roll[i] > roll[j]):

temp = roll[i]

roll[i] = roll[j]

roll[j] = temp

print("Sorted list: ")

print(roll)

print()

#Bubble sort

def bubble(roll,n):

print("$ Bubble Sort $")

k = 0

while (k<n):

for i in range(n):

if(i != (n-1)):

if (roll[i] > roll[i+1]):

temp = roll[i]

roll[i] = roll[i+1]

roll[i+1] = temp

k += 1

print("Sorted list: ")

print(roll)

print()

def topf(roll,n):

bubble(roll,n)

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

print("Top %d score"%(i),roll[-i])

print()

f = True

while (f):

print("Choices: ")

print("1. Enter values\n2. Selection Sort\n3. Bubble Sort\n4. Top Five Scores\n5. Exit")

ch = int(input("Enter your choice: "))

if (ch == 1):

enterval(roll,n)

elif (ch == 2):

selection(roll, n)

elif (ch == 3):

bubble(roll, n)

elif (ch == 4):

topf(roll,n)

elif (ch == 5):

print("Thank you")

f = False

else:

print("Invalid Input")

print()