a=[]

n=int(input("Enter the size:"))

for i in range(n):

element=int(input("Enter the element:"))

a.append(element)

print("Array is:",a)

# Bubble Sort

for j in range(n-1):

for k in range(n-j-1):

if(a[k]>a[k+1]):

a[k],a[k+1]=a[k+1],a[k]

print("sorted array is:",(a))

# Selection Sort

for i in range(n):

min = i

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

if a[j] < a[min]:

min = j

a[i], a[min] = a[min], a[i]

print("Sorted array is:", a)

# Insertion sort

for i in range(1,n):

key = i

temp = a.pop(i)

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

if a[j] > temp:

key = j

a.insert(key, temp)

print("Sorted array is:", a)