B-15 Write a Python program to store second year percentage of students in array. Write function for sorting array of floating point numbers in ascending order using

1. Insertion sort

Shell Sort and display top five scores

def insertion\_sort(list1):

# Outer loop to traverse through 1 to len(list1)

for i in range(1, len(list1)):

value = list1[i]

# Move elements of list1[0..i-1], that are

# greater than value, to one position ahead

# of their current position

j = i - 1

while j &gt;= 0 and value &lt; list1[j]:

list1[j + 1] = list1[j]

j -= 1

list1[j + 1] = value

return list1

# Driver code to test above

def shellSort(array, n):

# Rearrange elements at each n/2, n/4, n/8, ... intervals

interval = n // 2

while interval &gt; 0:

for i in range(interval, n):

temp = array[i]

j = i

while j &gt;= interval and array[j - interval] &gt; temp:

array[j] = array[j - interval]

j -= interval

array[j] = temp

interval //= 2

list = []

num\_stu = int(input(&quot;How many number of students:&quot;))

for i in range (num\_stu):

list.append(float(input(&quot;Enter the marks:&quot;)))

print(&quot;1.Insertion Sort \n2.ShellSort&quot;)

choise = int(input(&quot;Enter your choise:&quot;))

if (choise == 1):

print(&quot;The unsorted list is:&quot;, list)

print(&quot;The sorted marks list by Insertion method is:&quot;, insertion\_sort(list))

elif (choise==2):

print(&quot;The unsorted list is:&quot;, list)

size = len(list)

shellSort(list, size)

print(&#39;Sorted marks list by ShellSort method is:&#39;,list)

else:

print(&quot;Invalid your choise.&quot;)