#Merge sort algorithm

array = [2,4,6,5,3,1,7]

def sort(array):

if len(array) > 1:

m = len(array)/2

m = round(m, 0)

m = int(m)

array1 = array[0:m]

array2 = array[m:]

sort(array1)

sort(array2)

i = j = k = 0

while i < len(array1) and j < len(array2):

if array1[i] <= array2[j]:

array[k] = array1[i]

i += 1

else:

array[k] = array2[j]

j += 1

k += 1

while i < len(array1):

array[k] = array1[i]

i += 1

k += 1

while j < len(array2):

array[k] = array2[j]

j += 1

k += 1

return array

print(sort(array))

# This code is contributed by Hasan Akhtar