27 билет

def heapify(arr, n, i):

largest = i

l = 2 \* i + 1

r = 2 \* i + 2

if l < n and arr[i] < arr[l]:

largest = l

if r < n and arr[largest] < arr[r]:

largest = r

if largest != i:

arr[i],arr[largest] = arr[largest],arr[i]

heapify(arr, n, largest)

def heapSort(arr):

n = len(arr)

for i in range(n // 2 - 1, -1, -1):

heapify(arr, n, i)

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

arr[i], arr[0] = arr[0], arr[i]

heapify(arr, i, 0)

arr = [25,13,23,2,9,20,19,18,6,16,15,5,24,12,11,10,21,8,7,17,14,4,3,22,1,]

heapSort(arr)

n = len(arr)

print ("Sorted array is")

for i in range(n):

print ("%d" %arr[i]),