#quick sort

def partition (a,low,high):

pivot=a[high]

i=low-1

for j in range (low,high):

if (a[j]<=pivot):

i=i+1

(a[i],a[j])=(a[j],a[i])

(a[i+1],a[high])=(a[high],a[i+1])

return i+1

def qs (a,low ,high):

if (low<high):

pivot=partition (a,low,high)

qs(a,low,pivot-1)

qs(a,pivot+1,high)

import array as arr

n=int(input("Enter the numbers of the students: "))

a=arr.array('f',[])

for i in range (n):

e= float(input("Enter the percentage of the students: "))

a.append(e)

print("The array before sorting: ",a)

qs (a,0,n-1)

print("The array after the quick sort: ",a)

#Display the top 5 percentages

b=a[-5:]

for i in range (5):

for j in range (i+1,5):

if (b[i]<b[j]):

temp=b[i]

b[i]=b[j]

b[j]=temp

print("The top 5 percentages of the students are: ",b)