#ashish waghmode

# roll no 2174

def accept\_array(A):

n = int(input("Enter the total no. of student : "))

for i in range(n):

x = float(input("Enter the first year percentage of student %d : "%(i+1)))

A.append(x)

print("Array accepted successfully\n\n");

def display\_array(A):

n = len(A)

if(n == 0) :

print("\nNo records in the database")

else :

print("Array of FE Marks : ",end=' ')

for i in range(n) :

print("%.2f "%A[i],end=' ')

print("\n");

def Selection\_sort(A) :

n = len(A)

for pos in range(n-1):

min\_ind = pos

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

if(A[i] < A[min\_ind]) :

min\_ind = i

temp = A[pos]

A[pos] = A[min\_ind]

A[min\_ind] = temp

def Bubble\_sort(A) :

n = len(A)

for Pass in range(1,n) :

for i in range(n-Pass) :

if(A[i] < A[i+1]) :

temp = A[i]

A[i] = A[i+1]

A[i+1] = temp

def Main() :

A = []

while True :

print ("\t1 : Accept & Display the FE Marks")

print ("\t2 : Selection Sort Ascending order")

print ("\t3 : Bubble sort Descending order and display top five scores")

print ("\t4 : Exit")

ch = int(input("Enter your choice : "))

if (ch == 4):

print ("End of Program")

quit()

elif (ch==1):

accept\_array(A)

display\_array(A)

elif (ch==2):

print("Marks before sorting")

display\_array(A)

Selection\_sort(A)

print("Marks after sorting")

display\_array(A)

elif (ch==3):

print("Marks before sorting")

display\_array(A)

Bubble\_sort(A)

print("Marks after sorting")

display\_array(A)

if(len(A) >= 5) :

print("Top Five Scores : ")

for i in range(5) :

print("\t%.2f"%A[i])

else :

print("Top Scorers : ")

for i in range(len(A)) :

print("\t%.2f"%A[i])

else :

print ("Wrong choice entered !! Try again")

Main()

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* out put \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1 : Accept & Display the FE Marks

2 : Selection Sort Ascending order

3 : Bubble sort Descending order and display top five scores

4 : Exit

Enter your choice : 1

Enter the total no. of student : 4

Enter the first year percentage of student 1 : 66

Enter the first year percentage of student 2 : 33

Enter the first year percentage of student 3 : 77

Enter the first year percentage of student 4 : 88

Array accepted successfully

Array of FE Marks : 66.00 33.00 77.00 88.00

1 : Accept & Display the FE Marks

2 : Selection Sort Ascending order

3 : Bubble sort Descending order and display top five scores

4 : Exit

Enter your choice : 2

Marks before sorting

Array of FE Marks : 66.00 33.00 77.00 88.00

Marks after sorting

Array of FE Marks : 33.00 66.00 77.00 88.00

1 : Accept & Display the FE Marks

2 : Selection Sort Ascending order

3 : Bubble sort Descending order and display top five scores

4 : Exit

Enter your choice : 3

1 : Accept & Display the FE Marks

2 : Selection Sort Ascending order

3 : Bubble sort Descending order and display top five scores

4 : Exit

Enter your choice : 1

Enter the total no. of student : 4

Enter the first year percentage of student 1 : 66

Enter the first year percentage of student 2 : 33

Enter the first year percentage of student 3 : 77

Enter the first year percentage of student 4 : 88

Array accepted successfully

Array of FE Marks : 66.00 33.00 77.00 88.00

1 : Accept & Display the FE Marks

2 : Selection Sort Ascending order

3 : Bubble sort Descending order and display top five scores

4 : Exit

Enter your choice : 2

Marks before sorting

Array of FE Marks : 66.00 33.00 77.00 88.00

Marks after sorting

Array of FE Marks : 33.00 66.00 77.00 88.00

1 : Accept & Display the FE Marks

2 : Selection Sort Ascending order

3 : Bubble sort Descending order and display top five scores

4 : Exit

Enter your choice : 3

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