Assignment No 5

#Acceptance of Percentages of students :

def Accept\_Percentage(perc):

numstud = int(input("Enter the number of students : "))

if numstud >= 5:

for i in range(numstud):

perc.append(int(input("Enter the percentage of student {0}: ".format(i+1))))

return perc

else :

print("Number Of students should be greater than or equal to 5 !")

#Display of roll numbers :

def Display\_Percentage(perc):

for i in range(len(perc)):

print(perc[i],"%")

# Function for Selection Sort of elements

def Selection\_Sort(perc):

for i in range(len(perc)):

min= i

for j in range(i + 1, len(perc)):

if perc[min] > perc[j]:

min= j

perc[i], perc[min] = perc[min], perc[i]

print("Marks of students after performing Selection Sort on the list : ")

for i in range(len(perc)):

print(perc[i])

# Function for Bubble Sort of elements

def Bubble\_Sort(perc):

n = len(perc)

for i in range(n - 1):

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

if perc[j] > perc[j + 1]:

perc[j], perc[j + 1] = perc[j + 1], perc[j]

print("Marks of students after performing Bubble Sort on the list : ")

for i in range(len(perc)):

print(perc[i])

# Function for displaying top five percentages

def top\_Five(perc):

toplist = perc[::-1]

for i in range (0,5):

print(toplist[i])

#main

perc = []

flag = 1

while flag == 1:

print("\n+---------------------MENU---------------------+")

print("1. Accept Student percentage of students ")

print("2. Display the percentage of Student ")

print("3. Sort percentage from the list using sorting teqs ")

print("4. Exit\n")

ch = int(input("Enter your choice (from 1 to 5) : "))

if ch == 1:

Accept\_Percentage(perc)

elif ch == 2:

Display\_Percentage(perc)

elif ch == 3:

c=int(input("Select The sorting Teq : \n1) Selection Sort \n2)Bubble Sort (1/2) : "))

if c==1:

Selection\_Sort(perc)

a=str(input("Do you want to display top five marks from the list ? (yes/no) : "))

if a=='yes':

top\_Five(perc)

else :

print(" Thank You For using this sorting teq ! \n")

flag = 0

else :

Bubble\_Sort(perc)

a=str(input("Do you want to display top five marks from the list ? (yes/no) : "))

if a=='yes':

top\_Five(perc)

else :

print(" Thank You For using this sorting teq ! \n")

flag = 0

elif ch == 4 :

print("Thank You For Using This Program ! \n")

else :

print("Enter a valid choice !!")

flag = 0

#ktcode

Output :

+---------------------MENU---------------------+

1. Accept Student percentage of students

2. Display the percentage of Student

3. Sort percentage from the list using sorting teqs

4. Exit

Enter your choice (from 1 to 5) : 1

Enter the number of students : 5

Enter the percentage of student 1: 41

Enter the percentage of student 2: 31

Enter the percentage of student 3: 77

Enter the percentage of student 4: 88

Enter the percentage of student 5: 65

+---------------------MENU---------------------+

1. Accept Student percentage of students

2. Display the percentage of Student

3. Sort percentage from the list using sorting teqs

4. Exit

Enter your choice (from 1 to 5) : 1

Enter the number of students : 5

Enter the percentage of student 1: 41

Enter the percentage of student 2: 88

Enter the percentage of student 3: 99

Enter the percentage of student 4: 97

Enter the percentage of student 5: 51

+---------------------MENU---------------------+

1. Accept Student percentage of students

2. Display the percentage of Student

3. Sort percentage from the list using sorting teqs

4. Exit

Enter your choice (from 1 to 5) : 2

41 %

31 %

77 %

88 %

65 %

41 %

88 %

99 %

97 %

51 %

+---------------------MENU---------------------+

1. Accept Student percentage of students

2. Display the percentage of Student

3. Sort percentage from the list using sorting teqs

4. Exit

Enter your choice (from 1 to 5) : 3

Select The sorting Teq :

1) Selection Sort

2)Bubble Sort (1/2) : 1

Marks of students after performing Selection Sort on the list :

31

41

41

51

65

77

88

88

97

99

Do you want to display top five marks from the list ? (yes/no) : yes

99

97

88

88

77

+---------------------MENU---------------------+

1. Accept Student percentage of students

2. Display the percentage of Student

3. Sort percentage from the list using sorting teqs

4. Exit

Enter your choice (from 1 to 5) : 3

Select The sorting Teq :

1) Selection Sort

2)Bubble Sort (1/2) : 2

Marks of students after performing Bubble Sort on the list :

31

41

41

51

65

77

88

88

97

99

Do you want to display top five marks from the list ? (yes/no) : yes

99

97

88

88

77

+---------------------MENU---------------------+

1. Accept Student percentage of students

2. Display the percentage of Student

3. Sort percentage from the list using sorting teqs

4. Exit

Enter your choice (from 1 to 5) : 4

Thank You For Using This Program !