1.Exchange of two numbers

Using Naïve Approach

Input :

X = 10

Y = 50

temp = X

X = Y

Y = temp

Print(“Value of X:”,X)

Print(“Value of Y:”,Y)

Output :

Value of X: 50

Value of Y: 10

Using comma operator

Input :

X = 10

Y = 50

X,Y = Y,X

Print(“Value of X:”,X)

Print(“Value of Y:”,Y)

Output :

Value of X: 50

Value of Y: 10

Using XOR operator

Input :

X = 10

Y = 50

X = X^Y

Y = X^Y

X = X^Y

Print(“Value of X:”,X)

Print(“Value of Y:”,Y)

Output :

Value of X: 50

Value of Y: 10

Using Arithmetic operator

Input :

X = 10

Y = 50

X = X+Y  
Y = X-Y

X = X-Y

Print(“Value of X:”,X)

Print(“Value of Y:”,Y)

Output :

Value of X: 50

Value of Y: 10

2.Circulating the list of elements( built in functions & slice operator)

Input :

no\_of\_terms = int(input("Enter number of values : "))

list1 = []

for val in range(0,no\_of\_terms,1):

ele = int(input("Enter integer : "))

list1.append(ele)

print("Circulating the elements of list ", list1)

for val in range(0,no\_of\_terms,1):

ele = list1.pop(0)

list1.append(ele)

print(list1)

print(list1[0])

Output :

Enter number of values : 5

Enter integer : -2

Enter integer : -1

Enter integer : 0

Enter integer : 1

Enter integer : 2

Circulating the elements of list [-2, -1, 0, 1, 2]

[-1, 0, 1, 2, -2]

[0, 1, 2, -2, -1]

[1, 2, -2, -1, 0]

[2, -2, -1, 0, 1]

[-2, -1, 0, 1, 2]

-2

3.Calculate the distances between two points

Input :

def distance(x1, y1, x2, y2):

# Calculating distance

return (((x2 - x1)\*\*2 +(y2 - y1)\*\*2)\*\*0.5)

# Drivers Code

print( distance(3, 4, 4, 3))

Output :

1.4142135623730951

Practice Problems

1. Convert Fahrenheit to Celsius

Program:

f=int(input("Enter Fahrenheit value F in degree:"))

c= (f-32)\*5/9

print ("The Celsius value is ",c)

Output:

Enter Fahrenheit value F in degree: 100

The Celsius value is 37.77777777777778

2. Apply 5 % discount on total cost of n books

Program:

amt = int(input("Enter Sale Amount: "))

if(amt>0):

if amt<=5000:

disc = amt\*0.05

else:

disc=0.05 \* amt

print("Discount : ",disc)

print("Net Pay : ",amt-disc)

else:

print("Invalid Amount")

Output:

Enter Sale Amount: 500

Discount: 25.0

Net Pay: 475.0

BY

S RICHARD DEVAPRIYAN

22CSEA55