PYTHON LAB

PROGRAM 1:

**EXCHANGING OF TWO VALUES USING THIRD VARIABLE:**

p=int(input("enter the first value: "))

q=int(input("enter the second value: "))

print("the values beforwe swapping arew",p,q)

temp=p

p=q

q=temp

print("the values q after swapping are",p,q)

**OUTPUT**:

enter the first value: 48

enter the second value: 52

the values befor we swapping are 48 52

the values q after swapping are 52 48

**PROGRAM 2:**

**EXCHANGING OF VALUES USING ARITHMETIC OPERATOR:**

**PROGRAM:**

s= 59

t=16

print("the values before swapping :",s,t)

s,t=t,s

print("the valuews after swapping:",s,t)

**OUTPUT**:

the values before swapping : 59 16

the valuews after swapping: 16 59

**EXCHANGING OF VALUES XOR FUNCTION**

**PROGRAM:**

**j=58**

**k=46**

**print("the values before swapping:",j,k)**

**j=j^k**

**k=j^k**

**i=j^k**

**print("the values after swapping are:",j,k)**

**OUTPUT:**

the values before swapping: 58 46

the values after swapping are: 20 58

**EXCHANGING OF VALUES USING ARITHMETIC OPERATOR:**

**Program:**

x=45

y=25

print("the values before swapping are:",x,y)

x=x+y

y=x-y

x=x-y

print("the values after swapping are:",x,y)

**output:**

the values before swapping are: 45 25

the values after swapping are: 25 45

**2.CIRCULATING THE LIST OF VALUES USING IN BUILD FUNCTIONS:**

**PROGRAM:**

a=input("enter values: ").split(',')

print('the original list is {a}','\n','circulating the list')

for i in range(len(a)):

a.append(a[0])

a.pop(0)

print(a)

**output:**

enter values: 1,2,3,4,5

the original list is {a}

circulating the list

['1', '2', '3', '4', '5']

**CIRCULATING THE VALUES UAING SLICING OPERATOR:**

**PROGRAM:**

a=input("enter values: ").split(',')

print('the original list is {a}','\n','circulating the list')

for i in range(len(a)):

cir=a[1:]+[a[0]]

print(cir)

**OUTPUT:**

enter values: 1,2,3,4,5

the original list is {a}

circulating the list

['2', '3', '4', '5', '1']

**CALCULATE DISTANCE BETWEEN TWO POINTS:**

**PROGRAM:**

import math

x1=int(input("enter x1: "))

x2=int(input("enter x2: "))

y1=int(input("enter y1: "))

y2=int(input("enter y2: "))

d=math.sqrt((x2-x1)\*\*2+(y2-y1)\*\*2)

print("distance between two points is",d)

**OUTPUT:**

Enter x1: 3

enter x2: 7

enter y1: 2

enter y2: 8

distance between two points is 7.211102550927978