PYTHON PROGRAM

EXCHANGE OF TWO VALUES USING THIRD VARIABLE

PROGRAM:

a=int (input ("First value :"))

b=int (input ("Second value :"))

c=a

a=b

b=c

print("The exchanged value of a is:”, a)

print("The exchanged value of b is:”, b)

OUTPUT:

First value: 2

Second value: 3

The exchanged value of a is: 3

The exchanged value of b is: 2

EXCHANGE OF TWO VALUES USING COMMA OPERATOR

PROGRAM:

X=int (input ("First value :"))

Y=int (input ("Second value :"))

X, Y=Y, X

print ("The exchanged value of X is:”, X)

print ("The exchanged value of Y is:", Y)

OUTPUT:

First value: 31

Second value: 25

The exchanged value of X is: 25

The exchanged value of Y is: 31

EXCHANGE OF TWO VALUES USING ARITHMETIC OPERATOR

PROGRAM:

a=int (input ("First value :"))

b=int (input ("Second value :"))

a=a+b

b=a-b

a=a-b

print("The exchanged value of a is:",a)

print("The exchanged value of b is:",b)

OUTPUT:

First value :2

Second value :3

The exchanged value of a is: 3

The exchanged value of b is: 2

EXCHANGE OF TWO VALUES USING XOR OPERATOR

PROGRAM:

a=int (input ("First value :"))

b=int (input ("Second value :"))

a=a^b

b=a^b

a=a^b

print("The exchanged value of a is:",a)

print("The exchanged value of b is:",b)

OUTPUT:

First value :3

Second value :2

The exchanged value of a is: 2

The exchanged value of b is: 3

CIRCULATING THE LIST OF VALUES USING IN-BUILT 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

The original list is[a]

circulating the list

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

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

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

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

CIRCULATING THE LIST OF VALUES USING 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

The original list is [a]

Circulating the list

['2', '3', '1']

['2', '3', '1']

['2', '3', '1']

CALCULATE THE DISTANCE BETWEEN TWO POINTS

PROGRAM:

import math

x1=int(input ("X1:"))

x2=int(input ("X2:"))

y1=int(input ("Y1:"))

y2=int(input ("Y2:"))

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

print("The distance between two points is",D)

OUTPUT:

X1:2

X2:3

Y1:4

Y2:5

The distance between two points is 1.4142135623730951