Ex no1

1.EXCHANGE OF TWO VALUES

Using naïve approach

x=10

y=50

temp=x

x=y

y=temp

print("value of x:",x)

print("value of y:",y)

using comma(,) operator

x,y=y,x

print("value of x:",x)

print("value of y:",y)

using arithmatic operator

x=x+y

y=x-y

x=x-y

print("value of x:",x)

print("value of y:",y)

using XOR operator

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

value of x: 10

value of y: 50

value of x: 50

value of y: 10

value of x: 10

value of y: 50

2.CIRCULATING THE LIST OF VALUES

Using in built functions

test\_list=[1,4,6,7,2]

print("original list:"+str(test\_list))

test\_list=[test\_list[(i+3)%len(test\_list)]for i,x in enumerate (test\_list)]

print("list after left rotate by 3:"+str(test\_list))

test\_list=[test\_list[(i-3)%len(test\_list)]for i,x in enumerate (test\_list)]

print("list after right rotate by 3(back to original):"+str(test\_list))

using slicing operator

n=3

list\_1=[1,2,3,4,5,6]

list\_1=(list\_1[len(list\_1)-n:len(list\_1)]+list\_1[0:len(list\_1)-n])

print(list\_1)

OUTPUT

original list:[1, 4, 6, 7, 2]

list after left rotate by 3:[7, 2, 1, 4, 6]

list after right rotate by 3(back to original):[1, 4, 6, 7, 2]

[4, 5, 6, 1, 2, 3]

3.CALCULATE THE DISTANCE BETWEEN TWO POINT

p1=[4,0]

p2=[6,6]

distance=(((p1[0]-p2[0])\*\*2)+((p1[1]-p2[1])\*\*2))

print(distance)

OUTPUT

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