

## **SWAPPING OF TWO NUMBERS**

### **Program code:**

```
x=20 #Method 1 for swapping
y=50
print("Before Swapping")
print("Value of x:",x,"and y:",y)
x,y=y,x
print("After Swapping")
print("Value of x:",x,"and y:",y)
```

### **Output:**

```
Before Swapping
Value of x: 20 and y: 50
After Swapping
Value of x: 50 and y: 20
```

## **SWAPPING OF TWO NUMBERS**

### **Program Code:**

```
x=int(input("Enter a value:")) #Method 2 for swapping
y=int(input("Enter a value:"))
b=y
a=x
print("Values after swapping:",a,b)
```

### **Output:**

Enter a value:20

Enter a value:50

Values after swapping: 20 50

## **SWAPPING OF TWO NUMBERS**

### **Program Code:**

```
x=int(input("Enter a value:")) # Method 3 for swapping
y=int(input("Enter a value:"))

x=x+y
y=x-y
x=x-y

print("Values after Swapping x:",x,"y:",y)
```

### **Output:**

Enter a value:20

Enter a value:50

Values after Swapping x: 50 y: 20

## **CIRCULATING NUMBERS**

### **Program Code:**

```
s=int(input("Enter a the values in the List:"))
list[]
for i in range(0,5):
    element=int(input("Enter the value:"))
    list.append(element)
print("Circulating the list")
for i in range(0,5):
    element_deleted=list.pop(0)
    list.append(element_deleted)
print("The circulated list after",i+1,"rotation",list)
```

### **Output:**

Enter a value in the List:3

Enter the value:1

Enter the value:4

Enter the value:6

Circulating the list

The circulated list after 1 rotation[1,4,6]

The circulated list after 2 rotation[4,6,1]

The circulated list after 3 rotation[6,4,1]

## **CIRCULATING NUMBERS**

### **Program Code:**

```
def circulate(c,n):  
    for i in range(1,n+1):  
        d=c[i:]+c[:i]  
        print("Circulate","=",d)  
    return  
  
c=[178,289,324,448,570,698,188,842,956,106]  
n=int(input("Enter n:"))  
circulate(c,n)
```

### **Output:**

Enter n:2

Circulate=[289,324,448,570,698,188,842,956,106,178]

Circulate=[324,448,570,698,188,842,956,106,178,289]

## **DISTANCE BETWEEN TWO LINES**

### **Program Code:**

```
x1=int(input("Enter the number x1:"))
x2=int(input("Enter the number x2:"))
y1=int(input("Enter the number y1:"))
y2=int(input("Enter the number y2:"))
result=(((x2-x1)**2)+((y2-y1)**2))**0.5
print("Distance between: ",(x1,x2),"and",(y1,y2),"is",result)
```

### **Output:**

Enter the number x1:2

Enter the number x2:5

Enter the number y1:1

Enter the number y2:3

Distance between: (2, 5) and (1, 3) is 3.605551275463989