**PROGRAM 1 :**

EXCHANGE THE VALUES OF TWO VARIABLES

Method 1:

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

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

print("The values before swapping are ")

temp=p

p=q

q=temp

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

**OUTPUT**

**METHOD 1 :**

================= RESTART: C:/Users/TEMP.VCET.017/pyth12.py =================

Enter the first value:2

Enter the second value:3

The values before swapping are

the values after swapping are 3 2

>>>

**Method 2 :**

s=59

t=16

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

s,t=t,s

print("The values after swapping :",s,t)

**output**

**Method 2:**

============= RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth1b.py =============

The values before swapping : 16 59

The values after swapping : 16 59

**>>>**

**Method 3:**

x=45

y=25

print("The values after swapping are",x,y)

x=x+y

y=x-y

x=x-y

print("The values after swapping are ",x,y)

**Output**

**Method 3:**

============= RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth1c.py =============

The values after swapping are 45 25

The values after swapping are 25 45

>>>

**Method 4:**

j=58

k=46

print("The values before swapping are",j,k)

j=j^k

k=j^k

j=j^k

print("The values after swapping are",j,k)

**output**

Python 3.5.0 (v3.5.0:374f501f4567, Sep 13 2015, 02:16:59) [MSC v.1900 32 bit (Intel)] on win32

Type "copyright", "credits" or "license()" for more information.

>>>

============= RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth1c.py =============

The values after swapping are 45 25

The values after swapping are 25 45

>>>

**Program 2:**

**Method 1:**

s=int(input("enter the values in list:"))

list=[]

for i in range(0,s):

element=int(input("enter the value:"))

list.append(element)

print("circulating the list")

for i in range(0,s):

element\_deleted=list.pop(0)

list.append(element\_deleted)

print("The circulated list after" ,i+1,"rotation",list)

**output:**

============== RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth2.py ==============

enter the values in list:2

enter the value:5

enter the value:7

circulating the list

The circulated list after 1 rotation [7, 5]

The circulated list after 2 rotation [5, 7]

>>>

**Method 2:**

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()

print(a)

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)

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

**output:**

============= RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth2b.py =============

Enter values:4

The original list is ['4'] ,

circulating the list

['4']

enter values:1

The original list is ['1'] ,

circulating the list

['1']

enter x1:2

enter x2:3

enter y1:4

enter y2:5

The distance between two points is 1.4142135623730951

>>>

**Program 3:**

x1=int(input("Enter the value of x1:"))

x2=int(input("Enter the value of x2:"))

y1=int(input("Enter the value of y1:"))

y2=int(input("Enter the value of y2:"))

d1=(x2-x1)\*\*2

d2=(y2-y1)\*\*0.5

result=(d1+d2)\*\*0.5

print("distance between",x1,x2,"and",y1,y2,"is:",result)

**output:**

============== RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth3.py ==============

Enter the value of x1:5

Enter the value of x2:6

Enter the value of y1:12

Enter the value of y2:26

distance between 5 6 and 12 26 is: 2.177534703919536

## >>>

**Program 4:**

n=int(input("Enter the value of n:"))

i=1

h=1

for i in range(1,n+1):

h=h\*i

i=i+1

print("The factorial of a number",n,"is",h)

**output:**

============== RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth4.py ==============

Enter the value of n:4

The factorial of a number 4 is 24

**Program 5:**

e=int(input("Emter the number to be checked :"))

if(e%2==0):

print("The given number is even")

else:

print("The given number is odd")

**output:**

============== RESTART: C:/Users/TEMP.VCET.017/Desktop/pyth5.py ==============

Emter the number to be checked :75

The given number is odd