Method 1

p=int(input('enter the first value'))

q=int(input('enter the second value'))

print("the value before swapping are ",p,q)

temp=p

p=q

q=temp

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

o/p

enter the first value42

enter the second value58

the value before swapping are 42 58

the value after swapping are 58 42

method 2

s=59

t=16

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

s,t=s,t

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

o/p

the values before swapping : 59 16

the values after swapping : 59 16

method 3

x=45

y=25

print("the value after swapping ",x,y)

x=x+y

y=x-y

x=x-y

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

o/p

the value after swapping 45 25

the values after swapping are 25 45

method 4

j=58

k=46

print("the value before swapping ",j,k)

j=j^k

k=j^k

j=j^k

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

o/p

the value before swapping 58 46

the values after swapping are 46 58

EXPERIMENT 2

s=int(input("Enter a the values in the 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)

o/p

Enter a the values in the list:8

enter the value:5

enter the value:9

enter the value:2

enter the value:1

enter the value:7

enter the value:0

enter the value:3

enter the value:2

circulating the list

the circulated list after 1 rotation [9, 2, 1, 7, 0, 3, 2, 5]

the circulated list after 2 rotation [2, 1, 7, 0, 3, 2, 5, 9]

the circulated list after 3 rotation [1, 7, 0, 3, 2, 5, 9, 2]

the circulated list after 4 rotation [7, 0, 3, 2, 5, 9, 2, 1]

the circulated list after 5 rotation [0, 3, 2, 5, 9, 2, 1, 7]

the circulated list after 6 rotation [3, 2, 5, 9, 2, 1, 7, 0]

the circulated list after 7 rotation [2, 5, 9, 2, 1, 7, 0, 3]

the circulated list after 8 rotation [5, 9, 2, 1, 7, 0, 3, 2]

EXPERIMENT 2 METHOD 2

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)

o/p

enter n:6

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

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

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

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

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

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

>>>

EXPERIMENT 3 METHOD 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)\*\*2

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

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

o/p

enter the value of x1 :2

enter the value of x2 :6

enter the value of y1 :4

enter the value of y2 :7

distance between (2, 6) and (4, 7) is : 5.0

>>>

EXPERIMENT 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)

o/p

enter the value of n :7

the factorial of a number 7 is 1

the factorial of a number 7 is 2

the factorial of a number 7 is 6

the factorial of a number 7 is 24

the factorial of a number 7 is 120

the factorial of a number 7 is 720

the factorial of a number 7 is 5040

>>>

EXPERIMENT 5

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

if(e%2==0):

print("the given number is EVEN")

else:

print("the given number in ODD")

o/p

enter the number to be checked :768

the given number is EVEN

>>>

EXPERIMENT 6

g=int(input("enter the value of a :"))

i=2

for i in range (2,g):

if g%2==0:

print ("the given numer is NOT PRIME ")

break

else:

print("the given number is PRIME")

o/p

enter the value of a :5678enter the number to be checked :768

the given number is EVEN

>>>

EXPERIMENT 7

year=int(input("enter the year :"))

if(year%4==0):

if(year%100==0):

if (year%400==0):

print("the given year is leap year")

else:

print("thr given year is not a leap year")

o/p

enter the year :20000

the given year is leap year

>>>