EX 2

Apple Problem :

INPUT:

```
Weight= input("enter the no of kgs of apple:  "))
rate= input("enter the rate of 1kg of apple:  "))
tot=Weight*rate
print(tot)
```

OUTPUT:

Enter the no of kgs of apple: 5

Enter the rate of 1 kg of apple: 6

30.0

SIMPLE INTREST PROBLEM

PROGRAM:

```
p=int(input("enter the principal amt"))
r=int(input("enter the rate:"))
t=int(input("enter the time"))
si=p*t*r/100

Print("the Simple interest is:",si)
```

OUTPUT:

Enter the principal amt: 500

Enter the time: 6

Enter the rate: 5

The Simple interest is: 150.0

DISTANCE BETWEEN 2 POINTS:

PROGRAM:

```
x1=int(input("enter  x1:"))
x2= int (input("enter x2:"))
y1=int(input("enter  y1:"))
y2= int (input("enter y2:"))
d=(((x2-x1)**2+(y2-y1)**2)**(1/2))
```

Print("The distance between the points is:",d)

OUTPUT:

Enter x1: 4

Enter x2: 6

Enter y1: 0

Enter y2; 6

The distance between the points is: 6.324553320336759

BOOK STALL PROBLEM

```python
n1=int(input("enter the price of B1 :"))
n2=int(input("enter the price of B2 :"))
n3=int(input("enter the price of B3  :"))
n4=int(input("enter the price of B4 :"))
n5=int(input("enter the price of B5 :"))
Tot= n1+n2+n3+n4+n5
print("Total price of the books :",tot)
Dis=0.05*tot
Totamt=Tot-dis
print("Final price:",Totamt)
```

OUTPUT:

enter the price of B1 : 20

enter the price of B1 : 20

enter the price of B1 : 20

enter the price of B1 : 40

enter the price of B1 : 10

Total price of books : 110

Final price: 104.5

ARITHMETIC OPERATIONS :

PROGRAM:

```
a=int(input("enter A:"))
b=int(input("enter B:"))
s=a+b
f=a-b
c=a/b
d=a*b
print("sum=",s)
print("diff=",f)
print("product=",d)
print("divide=",c)
```

OUTPUT:

Enter A: 50

Enter B: 10

Sum=60

Diff=40

Product=500

Divide=5

CIRCULATING NUMBERS

PROGRAM:

```python
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(list)
```

OUTPUT:

Enter a the Values in the List :3

Enter the Value :5

Enter the Value :9

Enter the Value :2

Cieculating the elements of the list [5,9,2]

[9,2,5]

[2,5,9]

[5,9,2]

CIRCULATING NUMBERS

METHOD 2:

PROGRAM:

```
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 :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]
```

SWAPPING

METHOD 1:

PROGRAM

```
x=int(input("enter value of x:"))
y= int(input("enter value of y:"))
print("Before Swapping:",x,y)

c=x
x=y
y=c
print("After swapping:",x,y)
```

OUTPUT:

Enter value of x: 5

Enter value of y: 6

Before Swapping 5,6

After Swapping 6,5

METHOD 2:

PROGRAM:

```
s = 10`
 t = 20
print("The values before Swapping : ",s,t)
s, t = s, t
print("The values after Swapping : ",s,t)
```

OUTPUT:

The values before Swapping: 10 20

The values after Swapping: 20 10

METHOD 3:

PROGRAM:

x = 35

y = 15

print("Values before Swap",x,y)

x = x + y

 y = x - y

x = x - y

print("Values after Swap",x,y)

OUTPUT:

Values before swap 35 15

Values after swap 15 35

TEMPARATURE CONVERSION:

PROGRAM:

```
F= int (input("enter the Fahrenheit :"))
C= ((Fahrenheit-32)*5)/9.
print("Temperature in Celsius is: ",C);
```

OUTPUT:

Enter the fahrenheit: 50

Temparature in celsius: 10

PRIMENUMBER:

PROGRAM:

```python
g=int(input("Enter the Value of a :"))
i=2
 for i in range(2,g):
 if g%2==0:
print("The Given Number is NOT PRIME ")
break
else:
 print("The Given Number is PRIME")
```

OUTPUT:

Enter the Value of a :5678
The Given Number is NOT PRIME

LEAP YEAR:

PROGRAM

```python
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("The given Year is not a Leap Year")
```

OUTPUT:

Enter the Year :20000
The given Year is Leap Year