

Programming Assignment_3

1. Write a Python Program to Check if a Number is Positive, Negative or Zero?

In [12]:

```
checkNum=float(input("Enter a number:- "))
if checkNum<0:
    print("The",checkNum,"is negative")
elif checkNum>0:
    print("The",checkNum,"is Positive")
elif checkNum==0:
    print("The",checkNum,"is zero")
```

Enter a number:- 0.36

The 0.36 is Positive

2. Write a Python Program to Check if a Number is Odd or Even?

In [16]:

```
EvenOddNum=float(input("Enter The Number:- "))
if EvenOddNum%2==0:
    print("The",EvenOddNum,"is Even Number")
else:
    print("The",EvenOddNum,"is Odd Number")
```

Enter The Number:- -90

The -90.0 is Even Number

3. Write a Python Program to Check Leap Year?

In [23]:

```
LeapYear=int(input("Enter the Year:- "))
if LeapYear%4==0:
    print("The",LeapYear,"is Leap Number")
else:
    print("The",LeapYear,"is Not Leap Number")
```

Enter the Year:- 2024

The 2024 is Leap Number

4. Write a Python Program to Check Prime Number?

In [116]:

```
flag=True
PrimeNumber=int(input("Enter a number:- "))
if PrimeNumber>1:
    for i in range(2,PrimeNumber):
        if(PrimeNumber%i==0):
            flag=False
            break
```

```
if PrimeNumber==1:
    print("The Number is Not Prime",PrimeNumber)
elif flag==True:
    print("The Number is Prime",PrimeNumber)
else:
    print("The Number is Not Prime",PrimeNumber)
```

Enter a number:- 91
The Number is Not Prime 91

5. Write a Python Program to Print all Prime Numbers in an Interval of 1-10000?

In [165]:

```
Num=10001
flag=True
if Num>1:
    for i in range(2,Num):
        for j in range(2,i):
            if(i%j==0):
                print("The Number is Not Prime",j,i,Num)
                flag=False

elif(flag==True):
    print("The Number is Prime",i)

else:
    print("The Number is Prime",i)
```

In []: