**Python Assignment**

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

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

**3. Write a Python Program to Check Leap Year?**

**4. Write a Python Program to Check Prime Number?**

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

In [ ]:

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

In [7]:

num**=** int(input(" Enter a Number ")) *# Take input for a number to check*

**if** num**<**0:

print("This is Negative Number")

**elif** num**==**0:

print("This is Zero")

**else**: print("This is Positive Number")

Enter a Number 0

This is Zero

In [ ]:

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

In [17]:

num**=** int(input(" Enter a Number ")) *# Take input for a number to check*

**if** num**<**0: print("This is Negative number")

**elif** num**==**0: print("This is Zero")

**elif** num**==**1: print("This is Prime Number")

**elif** num**%2**==0: print("This is Even Number")

**elif** num**%2**!=0: print("This is odd number")

Enter a Number 3

This is odd number

In [ ]:

**3. Write a Python Program to Check Leap Year?**

In [21]:

year **=** int(input("Enter a year ")) *# Take input for a number to check*

**if** year**%4**==0:

print("This is Leap Year")

**else**: print("This is not Leap Year")

Enter a year 2022

This is not Leap Year

In [ ]:

**4. Write a Python Program to Check Prime Number?**

In [49]:

num**=** int(input(" Enter a Number ")) *# Take input for a number to check*

**if** num**<**0: print("This is Negative number")

**elif** num**==**0: print("This is Zero")

**elif** num**==**1: print("This is One")

**elif** num**==**2: print("This is Prime Number")

**elif** num**>**2:

**for** i **in** range(2,num):

**if**(num **%i**==0): print("Not a Prime Number")

**elif**(num**%i**!=0): print("This is Prime Number")

Enter a Number 4

Not a Prime Number

This is Prime Number

In [ ]:

In [37]:

print(range(10))

range(0, 10)

In [42]:

**for** i **in** range(2,2):

print(i)

In [ ]: