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?

**Solution: 1**

n= int(input("Enter a number"))

if n>0:

print("Positive number ")

elif n<0:

print("Negative number ")

else:

print("number is Zero")

**Solution: 2**

n= int(input("Enter the number"))

if(n%2==0):

print("Even number")

elif(n%2!=0):

print("Odd number")

**Solution: 3**

n=int(input("Enter the year in yyyy format"))

if(n%400 == 0 and n%100==0):

print("{0} is a leap year ".format(n))

elif(n%4==0 and n%100!=0):

print("{0} is a leap year ".format(n))

else:

print("{0} not a leap year ".format(n))

**Solution: 4**

n= int(input("Enter the number "))

flag = False

if n>1:

for i in range(2,n):

if(n%i==0): # finding the factor of the given number

flag = True

break

if flag:

print("the given number is not a prime number")

else:

print("the given number is a prime number")

**Solution: 5**

for number in range (1,10+1):

if number > 1:

for i in range (2, number):

if (number % i) == 0:

break

else:

print (number)