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

def checkNumber(num):

if num > 0:

print('{} is a Postive number'.format(num))

elif num < 0:

print('{} is a Negative number'.format(num))

else:

print("Number is Zero")

num = int(input("Enter a number: "))

checkNumber(num)

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

def checkNumber(num):

if num%2 == 0:

print('{} is a Even number'.format(num))

else:

print('{} is a Odd number'.format(num))

num = int(input("Enter a number: "))

checkNumber(num)

* Write a Python Program to Check Leap Year?

def checkYear(year):

if (year%4 == 0 and year%100 != 0 or year%400 == 0):

print(f'{year} is a Leap year')

else:

print(f'{year} is not a Leap year')

year = int(input("Enter year: "))

checkYear(year)

* Write a Python Program to Check Prime Number?

def isPrime(num):

flag = False

for i in range(2,num):

if num%i ==0:

flag= True

break

if(not flag):

print(f'{num} is a prime number')

else:

print(f'{num} is not a prime number')

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

isPrime(number)

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

primeNumbersList = []

def generatePrimeNumbers():

for x in range(1,10000):

flag=False

for y in range(2,x):

if (x%y ==0):

flag = True

break

if (not flag):

primeNumbersList.append(x)

generatePrimeNumbers()

print(primeNumbersList)