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

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

if num > 0 :

print("Number is positive.")

elif num < 0 :

print("Number is negative.")

else :

print("Number is zero.")

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

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

if num % 2 == 0:

print("Even number.")

else :

print("Odd number.")

1. Write a Python Program to Check Leap Year?

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

if num % 4 == 0 or num % 100 == 0 and num % 400 == 0:

print("Leap year.")

else:

print("Not leap year.")

1. Write a Python Program to Check Prime Number?

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

if num > 1:

for i in range(2, int(num/2)+1):

if (num % i) == 0:

print(num, "is not a prime number")

break

else:

print(num, "is a prime number")

else:

print(num, "is not a prime number")

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

n = 10000

primes = []

for i in range (2, n+1):

for j in range(2, i):

if i % j == 0:

break

else:

primes.append(i)

print(primes)