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

num=-50

if(num==0):

print("Given number is Zero")

elif(num>0):

print("positive number")

else:

print("Negative number")

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

num=5

if(num%2==0):

print(f"{num} is a even number")

else:

print(f"{num} is a odd number")

1. Write a Python Program to Check Leap Year?

def leap(year):

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

year=2024

if(leap(year)):

print(f"{year} is a leap year")

else:

print(f"{year} is a non-leap year")

1. Write a Python Program to Check Prime Number?

def prime(num):

if(num==1):

return False

for i in range(2,num):

if(num%i==0):

return False

return True

num=2

if(prime(num)):

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

else:

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

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

def prime(num):

if(num==1):

return False

for i in range(2,num):

if(num%i==0):

return False

return True

for i in range(1,10000):

if(prime(i)):

print(i)