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

num = int(input("number: "))

if(num > 0):

    print(num, "Positive")

elif(num < 0):

    print(num, "Negative")

else:

    print(num, "Zero")

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

num = int(input("number: "))

if(num % 2 == 0):

    print(num, "Nummber")

else:

    print(num, "Odd Number")

3. Write a Python Program to Check Leap Year?

year = int(input("Year: "))

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

    print("Leap Year")

else:

    print("Not a Leap Year")

4. Write a Python Program to Check Prime Number?

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

p = True

if num <= 1:

print("neither prime nor composite")

else:

d = 2

while(d\*d <= num):

if(num%d==0):

p = False

break

d = d + 1

if(num > 1):

if(p):

print("prime number")

else:

print("not a prime number")

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

for i in range(1, 100001):

    print(i, end = ' ')