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

**Ans:**

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

if a==0:

print("number is 0")

elif a>0:

print("number is positive")

else:

print("number is negative")

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

**Ans:**

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

if a%2==0:

print("number is even")

else:

print("number is odd")

1. Write a Python Program to Check Leap Year?

**Ans:**

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

if a%4==0:

print("Leap year")

else:

print("not a leap year")

1. Write a Python Program to Check Prime Number?

**Ans:**

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

for i in range(2,a):

if a%i==0:

print("Not a prime number")

break

else:

print("it is prime number")

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

**Ans:**

for i in range(1, 10001):

for j in range(2,i):

if i%j==0:

break

else:

print(i)