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

**Answer-**

num=int(input("Give the input integer"))

if num == 0:

print("Your input is zero")

elif num>0:

print("Your input is positive")

else:

print("Your input is negative")

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

**Answer-**

num=int(input("Give the input integer"))

if num%2 ==0:

print("Your input is even")

else:

print("Your input is obb")

1. **Write a Python Program to Check Leap Year?**

**Answer-**

year=int(input("Give the input YEAR"))

if year%4==0 or year%400==0:

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

else:

print(f"{year} is not a leap year")

1. **Write a Python Program to Check Prime Number?**

**Answer-**

import sys

num=int(input("Give the input integer"))

for x in range (2,num):

if num%x==0:

print("Your input is not a prime number")

sys.exit(0)

print("Your input is a prime number")

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

**Answer-**

num=int(input("Give the input integer"))

flag=False

for i in range (2,num):

for x in range (2,i):

if i%x==0:

flag=True

if not flag:

print(i)

flag=False