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

Ans1

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

if number > 0:

print("The number is positive")

elif number < 0:

print("The number is negative")

else:

print("The number is zero")

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

Ans2

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

if number % 2 == 0:

print("The number is even")

else:

print("The number is odd")

3. Write a Python Program to Check Leap Year?

Ans3

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

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

print(year, "is a leap year")

else:

print(year, "is not a leap year")

4. Write a Python Program to Check Prime Number?

Ans4

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

if number > 1:

for i in range(2, number):

if (number % i) == 0:

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

break

else:

print(number, "is a prime number")

else:

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

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

Ans5

def is\_prime(number):

if number > 1:

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

if (number % i) == 0:

return False

else:

return True

else:

return False

for i in range(1, 10001):

if is\_prime(i):

print(i)