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

**a = int(input("Enter an integer : "))**

**if(a > 0):**

**print("Number is positive")**

**elif (a < 0):**

**print("Number is Negative")**

**else:**

**print("Number is 0")**

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

**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?

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

**if(a %4 == 0):**

**print("It’s leap year")**

**else:**

**print("It’s not a leap year")**

1. Write a Python Program to Check Prime Number?

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

**flag = 0**

**for i in range(2, a-1):**

**if(a % i == 0):**

**flag = 1**

**break**

**if(flag == 1):**

**print("Not a prime")**

**else:**

**print("It's prime")**

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

**def prime(a):**

**flag = 0**

**for i in range(2, a-1):**

**if(a % i == 0):**

**flag = 1**

**break**

**if(flag == 0):**

**print("{} ".format(a))**

**print("Prime numbers are: ")**

**for i in range(2, 10000):**

**prime(i)**