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

**Ans:**

**num=int(input())**

**if num>0:**

**print("Positive")**

**elif num<0:**

**print("Negative")**

**else:**

**print("Zero")**

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

**Ans:**

**num=int(input())**

**x=num%2**

**if x==0:**

**print("Even")**

**else:**

**print("Odd")**

1. Write a Python Program to Check Leap Year?

**Ans:**

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

**if year%400==0:**

**print("Leap year")**

**else:**

**print("Non leap year")**

1. Write a Python Program to Check Prime Number?

**Ans:**

**num=int(input())**

**count=0**

**for i in range(1,(num//2)+1):**

**if num%i==0:**

**count+=1**

**if(count>1) or num==1:**

**print("Non prime",count)**

**else:**

**print("Prime",count)**

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

**Ans:**

**for i in range(1,10000+1):**

**count=0**

**for j in range(1,(i//2)+1):**

**if count>1:**

**break**

**elif i%j==0:**

**count+=1**

**if count<=1 and i!=1:**

**print(i,end=',')**

**count=0**