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

**a = int(input('Enter value: '))**

**if a>0:**

**print(a, 'is a positive value')**

**elif a<0:**

**print(a, 'is a positive negative')**

**else:**

**print(a, 'is zero')**

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

**a = int(input('Enter value: '))**

**if a%2==0:**

**print(a, 'is a even')**

**else:**

**print(a, 'is odd')**

1. Write a Python Program to Check Leap Year?

**year=int(input('Enter year: '))**

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

**print('The year is a leap year!')**

**else:**

**print('The year is not a leap year!')**

1. Write a Python Program to Check Prime Number?

**a = int(input('enter number: '))**

**if a>1:**

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

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

**print(a, 'is not a prime number')**

**break**

**else:**

**print(a, 'is a prime number')**

**else:**

**print(a, 'is not a prime number')**

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

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

**if num>1:**

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

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

**break**

**else:**

**print(num)**