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

a=int(input("Enter a number : "))  
  
if a>0:  
 print("positive number")  
  
elif a<0:  
  
 print("Entered number is negative")  
else :  
 print("Entered number is zero")

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

a=int(input("Enter a number : "))  
def OddorEven(a):  
  
 if a%2==0:  
 print("even Number")  
 else:  
 print("Odd Number")  
  
OddorEven(a)

1. Write a Python Program to Check Leap Year?

year=int(input("Enter year to be chekced : "))  
  
def LeapYr(a):  
 if (year % 4 == 0 and year % 100 != 0) or year % 400 == 0:  
 print(f'{year} is a Leap year')  
 else:  
 print(f'{year} is not a Leap year')  
LeapYr(year)

1. Write a Python Program to Check Prime Number?

a=int(input("Enter a number : "))  
def isPrime(a):  
  
 flag=False  
  
 for i in range(2,a):  
 if a%i==0:  
 flag=True  
 break  
  
 if (not flag):  
 print("entered no is prime")  
 else:  
 print("entered no is not prime")  
  
isPrime(a)

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

for num in range(1, 10000):  
 if num == 1:  
 print(num)  
 elif num > 1:  
 for i in range(2, num):  
 if (num % i) == 0:  
 break  
 else:  
 print(num)