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

Answer:

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

if num > 0:

    print("Positive number")

elif num == 0:

    print("Zero")

else:

    print("Negative number")

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

Answer:

num = int(input("Enter a number: "))

if (num % 2) == 0:

    print("{0} is Even number".format(num))

else:

    print("{0} is Odd number".format(num))

1. Write a Python Program to Check Leap Year?

Answer:

year = int(input("Enter a year: "))

if (year % 4) == 0:

    if (year % 100) == 0:

        if (year % 400) == 0:

           print("{0} is a leap year".format(year))

        else:

            print("{0} is not a leap year".format(year))

    else:

        print("{0} is a leap year".format(year))

else:

    print("{0} is not a leap year".format(year))

1. Write a Python Program to Check Prime Number?

Answer:

number = int(input("Enter any 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")

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

Answer:

#lower = int(input("Enter lower range: "))

#upper = int(input("Enter upper range: "))

lower=1

upper=10000

for num in range(lower,upper + 1):

    if num > 1:

        for i in range(2,num):

            if (num % i) == 0:

                break

        else:

            print(num)