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

#Python Program to Check if a Number is Positive, Negative or Zero

def check(n):

# to check positive number

if n > 0:

print(n,"is Positive number")

#to check for negative number

elif n < 0:

print(n,"is Negative Number")

else:

print(n,"is zero")

check(5)

check(-8)

check(0)

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

#Python Program to Check if a Number is Odd or Even

def evenOdd(n):

#if remainder is 0 then number is even

if(n %2 == 0):

print(n, "is a even number")

elif(n %2 != 0):

print(n,"is a odd number")

else:

print("null")

n=3

1. Write a Python Program to Check Leap Year?

#Python program to check if year is a leap year or not

year = 2020

if (year % 4)==0:

if (year % 100)==0:

if (year % 400)==0:

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

else:

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

else:

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

else:

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

1. Write a Python Program to Check Prime Number?

#Python Program to Check Prime Number

num = 23

flag=False

if num > 1 :

for i in range(2,num):

if(num % i) == 0:

flag=True

break

if flag:

print(num, "is not a prime number")

else:

print(num,"is a prime number")

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

#Python Program to Print all Prime Numbers in an Interval of 1-10000

lower = 0

upper = 1000

print("prime numbers between",lower,"and",upper)

for num in range(lower,upper+1):

if num > 1:

for i in range(2,num):

if(num % i)==0:

break

else:

print(num)