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

Ans1.

import logging as lg

lg.basicConfig(level = lg.INFO)

def check\_num():

try:

lg.info('check the number')

k=int(input('Enter the number'))

if k<0:

return 'Negatve Number'

elif k>0:

return 'Positive Number'

else:

return 'Number is zero'

except Exception as e:

print('Error occured : ',e)

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

Ans2.

import logging as lg

lg.basicConfig(level = lg.INFO)

def check\_num():

try:

lg.info('check the number')

k=int(input('Enter the number'))

if k%2==0:

return 'Even'

else:

return 'odd'

except Exception as e:

print('Error occured : ',e)

1. Write a Python Program to Check Leap Year?

Ans3.

import logging as lg

lg.basicConfig(level = lg.INFO)

def check\_leap():

try:

lg.info('check the number')

k=int(input('Enter the number'))

if k%400==0:

return 'Leap year'

elif k%100==0:

return 'Not a leap year'

elif k%4==0:

return 'Leap year'

else:

return 'Not a leap year'

except Exception as e:

print('Error occured : ',e)

1. Write a Python Program to Check Prime Number?

Ans4.

import logging as lg

lg.basicConfig(level = lg.INFO)

def check\_prime():

try:

lg.info('Check the number')

k=int(input('Enter the number'))

c=0

if k>1:

for i in range(2,k+1):

if k%i==0:

c=c+1

if c==1:

return 'Prime No.'

else:

return 'Not a prime no.'

except Exception as e:

print('Error occured:',e)

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

Ans5.

import logging as lg

lg.basicConfig(level = lg.INFO)

def print\_prime():

try:

lg.info('Print Prime numbers')

for i in range(1,10001):

if i>1:

for j in range(2,i):

if i%j==0:

break

else:

print(i)

except Exception as e:

print('Error occured:',e)