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

def check(num):

if num<0:

print("Entered num is Negative.")

elif num==0:

print("Entered num is Zero")

else:

print("Entered Num is Positive")

def takeInput():

num= int(input("enter any number to check positive, Negative or Zero : "))

check(num)

if \_\_name\_\_=='\_\_main\_\_':

takeInput()

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

def check(num):

if num > 0:

if num%2==0:

print("Entered num is Even.")

else:

print("Entered Num is Odd")

else:

print("Enter positive numbers only ")

def takeInput():

num= int(input("enter any number to check odd or even"))

check(num)

if \_\_name\_\_=='\_\_main\_\_':

takeInput()

1. **Write a Python Program to Check Leap Year?**

def check(year):

if year % 4 == 0 and year % 100 != 0:

print(year, "is a Leap Year")

elif year % 100 == 0:

print(year, "is not a Leap Year")

elif year % 400 ==0:

print(year, "is a Leap Year")

else:

print(year, "is not a Leap Year")

def takeInput():

year= int(input("enter year : "))

check(year)

if \_\_name\_\_=='\_\_main\_\_':

takeInput()

1. **Write a Python Program to Check Prime Number?**

def check(num):

flag = False

if num > 1:

for i in range(2, num):

if (num % i) == 0:

flag = True

break

if flag:

print(str(num)+ "is not a prime number")

else:

print(num, "is a prime number")

def takeInput():

num= int(input("enter any number : "))

check(num)

if \_\_name\_\_=='\_\_main\_\_':

takeInput()

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

def check():

print("prime Numbers in interval of 1-10000 are ")

for x in range(1,10000+1):

for i in range(2, x):

if (x % i) == 0:

break

else:

print(x)

if \_\_name\_\_=='\_\_main\_\_':

check()