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

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

if num > 0:

print("Positive number")

elif num == 0:

print("Zero")

else:

print("Negative number")

Enter a number:9

Positive Number

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

ANS: # defining the function having the one parameter as input

def evenOdd(n):

#if remainder is 0 then num is even

if(n==0):

return True

#if remainder is 1 then num is odd

elif(n==1):

return False

else:

return evenOdd(n-2)

# Input by geeks

num=3

if(evenOdd(num)):

print(num,"num is even")

else:

print(num,"num is odd")

3 num is odd

1. Write a Python Program to Check Leap Year?

ANS: # Python program to check the given year is leap or not

n = input("Please enter year")

year = int (n)

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))

2023 is not a leap year

1. Write a Python Program to Check Prime Number?

ANS: num = 11

# If given number is greater than 1

if num > 1:

# Iterate from 2 to n / 2

for i in range(2, int(num/2)+1):

# If num is divisible by any number between

# 2 and n / 2, it is not prime

if (num % i) == 0:

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

break

else:

print(num, "is a prime number")

else:

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

11 is a prime number

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

ANS: lower = 900

upper = 1000

print("Prime numbers between", lower, "and", upper, "are:")

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

# all prime numbers are greater than 1

if num > 1:

for i in range(2, num):

if (num % i) == 0:

break

else:

print(num)

Prime numbers between 1 and 1000 are:

907

911

919

929

937

941

947

953

961

971

977

983

991

997