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

A: # check a no as zero/poistive/negetive

num=int(input(" enter the input:"))

if num>0:

print( '{} is positive'.format(num))

elif num<0:

print( '{} is negetive'.format(num))

else:

print( '{} is euql to zero'.format(num))

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

A: # even odd number

num=int(input(" enter the input:"))

if num%2==0:

print( '{} is an even number'.format(num))

else:

print( '{} is an odd number'.format(num))

1. Write a Python Program to Check Leap Year?

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

year = 4

# To get year (integer input) from the user

# year = int(input("Enter a year: "))

# divided by 100 means century year (ending with 00)

# century year divided by 400 is leap year

if (year % 400 == 0) and (year % 100 == 0):

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

# not divided by 100 means not a century year

# year divided by 4 is a leap year

elif (year % 4 ==0) and (year % 100 != 0):

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

# if not divided by both 400 (century year) and 4 (not century year)

# year is not leap year

else:

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

1. Write a Python Program to Check Prime Number?

A: num =int(input(" enter the num:"))

# To take input from the user

#num = int(input("Enter a number: "))

# define a flag variable

flag = False

if num == 1:

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

elif num > 1:

# check for factors

for i in range(2, num):

if (num % i) == 0:

# if factor is found, set flag to True

flag = True

# break out of loop

break

# check if flag is True

if flag:

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

else:

print(num, "is a prime number")

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

A: minimum = int(input(" Please Enter the Minimum Value: "))

maximum = int(input(" Please Enter the Maximum Value: "))

for Number in range (minimum, maximum + 1):

count = 0

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

if(Number % i == 0):

count = count + 1

break

if (count == 0 and Number != 1):

print(" %d" %Number, end = ' ')