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

Ans.

n = int(input("Enter a number : "))

if n < 0:

a = f"{n} is negative"

print(a)

elif n == 0:

print(f"{n} is equal to zero")

else:

print(f"{n} is postive")

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

Ans.

n = int(input("Enter the number : "))

if (n%2) == 0:

print(f"{n} is even")

else:

print(f"{n} is odd")

1. Write a Python Program to Check Leap Year?

Ans.

n = int(input("Enter an year : "))

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

print(f"{n} is leap year")

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

print(f"{n} is year")

else:

print(f"{n} is not leap year")

1. Write a Python Program to Check Prime Number?

Ans.

n = int(input("Enter a number : "))

if(n>1):

for i in range(2,n):

if((n%i)==0):

print(f"{n} is not a prime ")

break

# else:

# print(f"{n} is a prime number")

else:

print(f"{n} is a prime number")

else:

print(f"{n} is not valid number")

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

Ans.

As we know 1 is not a prime so smallest prime is 2

first = 2

last = 10000

for number in range(first,last+1):

if(number >1):

for i in range(2,number):

if(number%i)==0:

print(f"{number} is not a print")

break

else:

print(f"{number} is a prime number")

else:

print(f"{number} is invalid")