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

# Python program to Check if a Number is Positive, Negative or Zero?

# Get a number from the user

while True:

try:

a = input("Enter the number : ")

a = float(a)

break

except ValueError:

print("Enter a valid number ")

# Check the conditions and print the message.

if a > 0:

print("The number is positive")

elif(a < 0):

print("The number is negative")

elif(a == 0):

print("The number is zero")

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

# Python Program to Check if a Number is Odd or Even

# Get a number from the user

while True:

try:

a = input("Enter the integer number : ")

a = int(a)

break

except ValueError:

print("Enter a valid integer number ")

# Check the conditions and print the message.

if a % 2 == 0:

print("The number is even")

else:

print("The number is odd")

1. Write a Python Program to Check Leap Year?

# Python Program to Check leap year

# Get the year from the user

while True:

try:

a = input("Enter the year : ")

a = int(a)

break

except ValueError:

print("Enter a valid integer number : ")

# Check the condition and print the message.

if a % 4 == 0:

print("The provided year ",a, " is a leap year")

else:

print("The provided year ",a, " is not a leap year")

1. Write a Python Program to Check Prime Number?

# Python Program to Check Prime Number

# Get the number from the user

while True:

try:

a = input("Enter the number : ")

a = int(a)

break

except ValueError:

print("Enter a valid integer number : ")

# Check the condition and print the message.

prime = True

for i in range(2,a):

if a!=i and a % i == 0:

prime = False

if prime == True:

print("The given number is prime")

else:

print("The given number is not prime")

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

# Python Program to Print all Prime Numbers in an Interval of 1-10000

# Check the condition and print the prime numbers

for i in range(2,10001):

b = True

for j in range(1,i):

if j != 1 and i % j == 0:

b = False

if b:

print(i)