Experiment 7:

- 1. Write a program that prompts the user to enter two integers and displays their greatest common divisor (GCD). You can rewrite the program 6.3, and implement this program with the help of a function and place it into a module named **GCDFunction.py**.
- 2. Apply the concept of code modularization to improve the program implemented in experiment 6.4 with title **PrimeNumber.py**. This program defines two new functions, **isPrime** and **printPrimeNumbers**. The **isPrime** function determines whether a number is prime, and the **printPrimeNumbers** function prints prime numbers.

NOTE: In a line, total prime numbers permissible are less than 15 in the count.

3. (Conversions between Celsius and Fahrenheit) write a module that contains the following two functions:

```
# Converts from Celsius to Fahrenheit def celsiusToFahrenheit(celsius):
```

Converts from Fahrenheit to Celsius **def** fahrenheitToCelsius(fahrenheit):

The formulas for the conversion are:

celsius =
$$(5/9)$$
 * (fahrenheit – 32)
fahrenheit = $(9/5)$ * celsius + 32

4. (Conversions between feet and meters) Write a module that contains the following two functions:

```
# Converts from feet to meters def footToMeter(foot):
```

Converts from meters to feet **def** meterToFoot(meter):

The formulas for the conversion are:

```
foot = meter / 0.305
meter = 0.305 * foot
```

Write a test program that invokes these functions to display the following tables:

Meters Feet
20.0 66.574
26.0 81.967

 9.0 2.745
 |
 60.0 196.721

 10.0 3.050
 |
 66.0 213.115