# **Exercises**

#### CH-1:

Send data on Serial monitor (only once and Continuously).

#### CH-2:

- Print "HELLO WORLD" with a delay of 2 sec.
- Read a character from serial monitor and send it again on serial monitor.
- Read the string from serial monitor and send it again on serial monitor.

## CH-3:

- Toggle the internal and one external LED.
- Display 0 to 9 in a 7-Segment LED.

## CH-4:

- Digital I/O
- Digital I/O using Debounce.

#### CH-5:

Analog Read.

#### CH-6:

Generate a PWM signal with increasing duty cycle and then back to 0.

#### CH-7:

- Toggle the LED using Interrupt.
- Toggle the LED using Timer based Interrupt.

#### CH-8:

UART Send and Receive.

## CH-9:

- UART Send and Receive with an extra function (printBuffer) (sender device sending different data on serial monitor also).
- UART Send and Receive on both sides with an extra function (printBuffer) (sender device sending different data on serial monitor also).
- UART Send and Receive on both sides using SoftwareSerial library.

# CH-10:

• I2C Mater-Slave (Send and Receive on both sides)

# **CH-11:**

• SPI Mater-Slave (Send and Receive on both sides)