## Lab Worksheet #5

CA5305 (Internet of Things) October 2021 – January 2022 Instructor: Dr. M. Deivamani

Due: Thursday, December 24, 2021(11:59pm)

**Task 1:** Create a sketch that fades the LED by using different ways and demonstrate. Also, observe the difference by varying the rate of fade in and fade out.

**Task 2:** Modify the Task 1 code in such a way that one fades in and other one fades out by using two or more LEDs.

**Task 3:** Modify the Task 1 program to control the intensity of the LED based on the keyboard input.

**Task 4:** Create a sketch that makes a "3-way lamp" using the LED and button to let the user turn on the light at 100/50/25/off.

**Task 5:** Create a sketch that makes a LED flash at a rate relative to the potentiometer position(resistance) and try to include a serial output of the potentiometer value and flash rate.

**Task 6:** Create a sketch to measure the humidity and temperature using Temp46/DHT11 and display the same in the serial monitor.