**Objective**: To become familiar with the Arduino IDE and to start writing code.

**Prelab**: No prelab for this assignment

**Part 1**:  Debugged and ran the first program to get the Led light to blink ever second. Then had the lab instructor verify the program. Code is included in Appendix A.

**Part 2**:  The program was changed to make a light on the circuit board to blink every three seconds while the aurdino board light blinked every one second. Code is included in Appendix B.

**Appendix A**: Code for Part 1

unsigned long LedTimer;

void setup() {

 pinMode( 13, OUTPUT );

 LedTimer = millis();

}

void loop() {

 if(millis() - LedTimer >= 1000 ){

    if( digitalRead(13) == HIGH ) {

     digitalWrite( 13, LOW );

    }

    else {

     digitalWrite( 13, HIGH );

    }

    LedTimer += 1000;

 }

}

**Appendix B**: Code for Part 2

unsigned long LedTimer;

unsigned long LedTimer3;

void setup() {

 pinMode( 13, OUTPUT );

 pinMode( 12, OUTPUT );

 LedTimer = millis();

 LedTimer3 = millis();

}

void loop() {

 if(millis() - LedTimer >= 1000 ){

    if( digitalRead(13) == HIGH ) {

     digitalWrite( 13, LOW );

    }

    else {

     digitalWrite( 13, HIGH );

    }

    LedTimer += 1000;

 }

 if(millis() - LedTimer3 >= 3000 ){

    if( digitalRead(12) == HIGH ) {

     digitalWrite( 12, LOW );

    }

    else {

     digitalWrite( 12, HIGH );

    }

    LedTimer3 += 3000;

 }

}