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;
 }
}
```