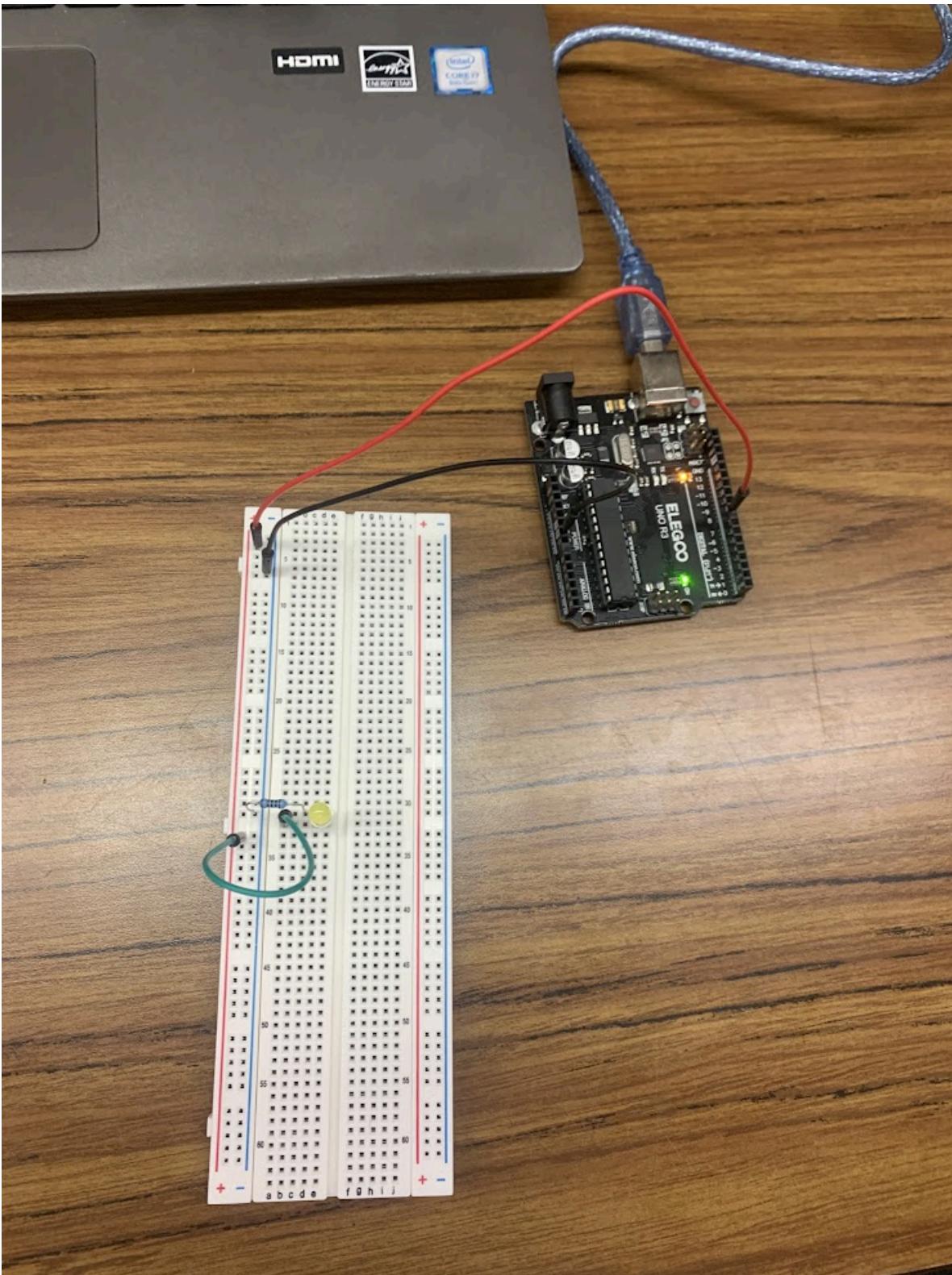


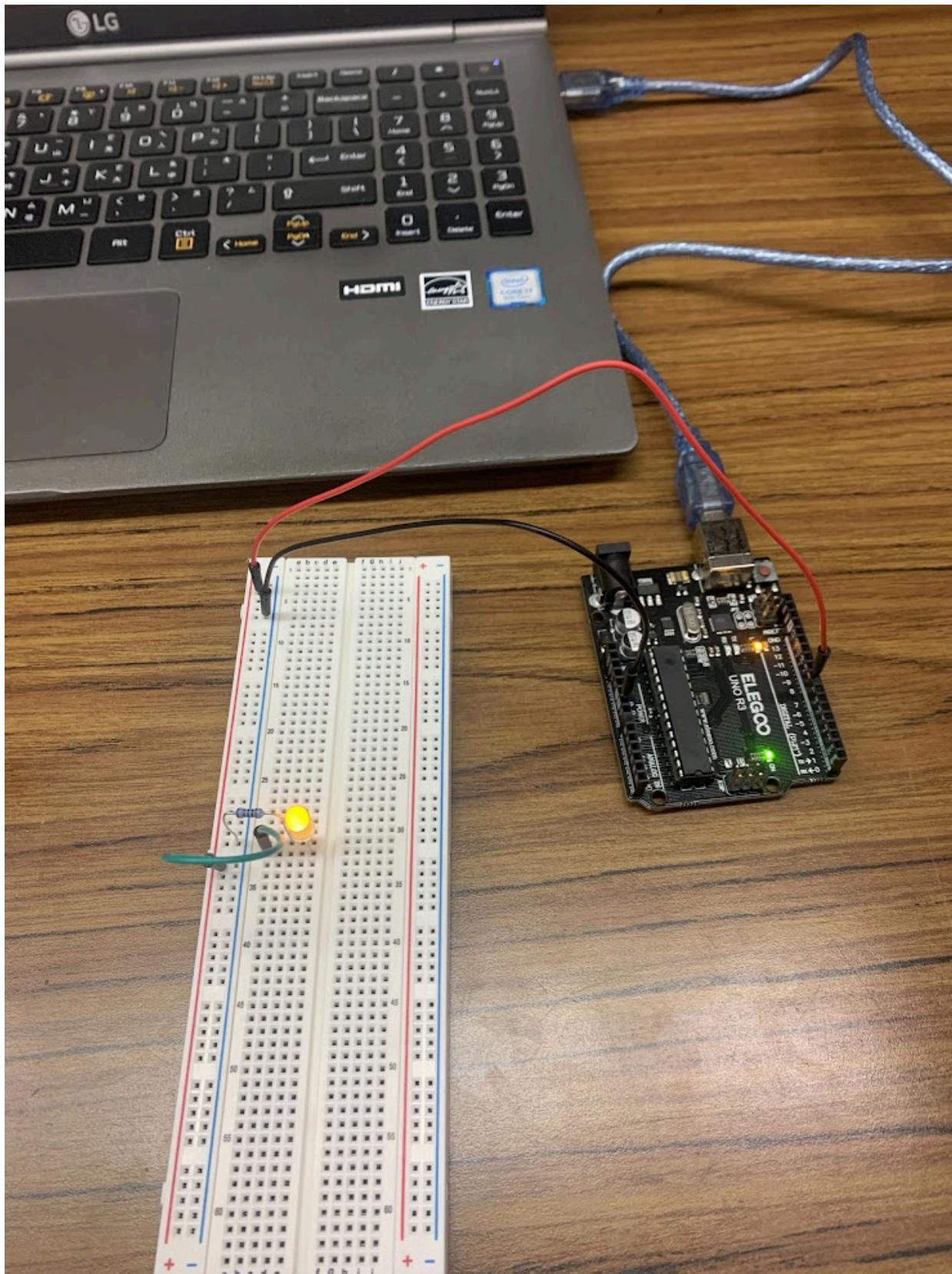
TASK 3



TASK 4

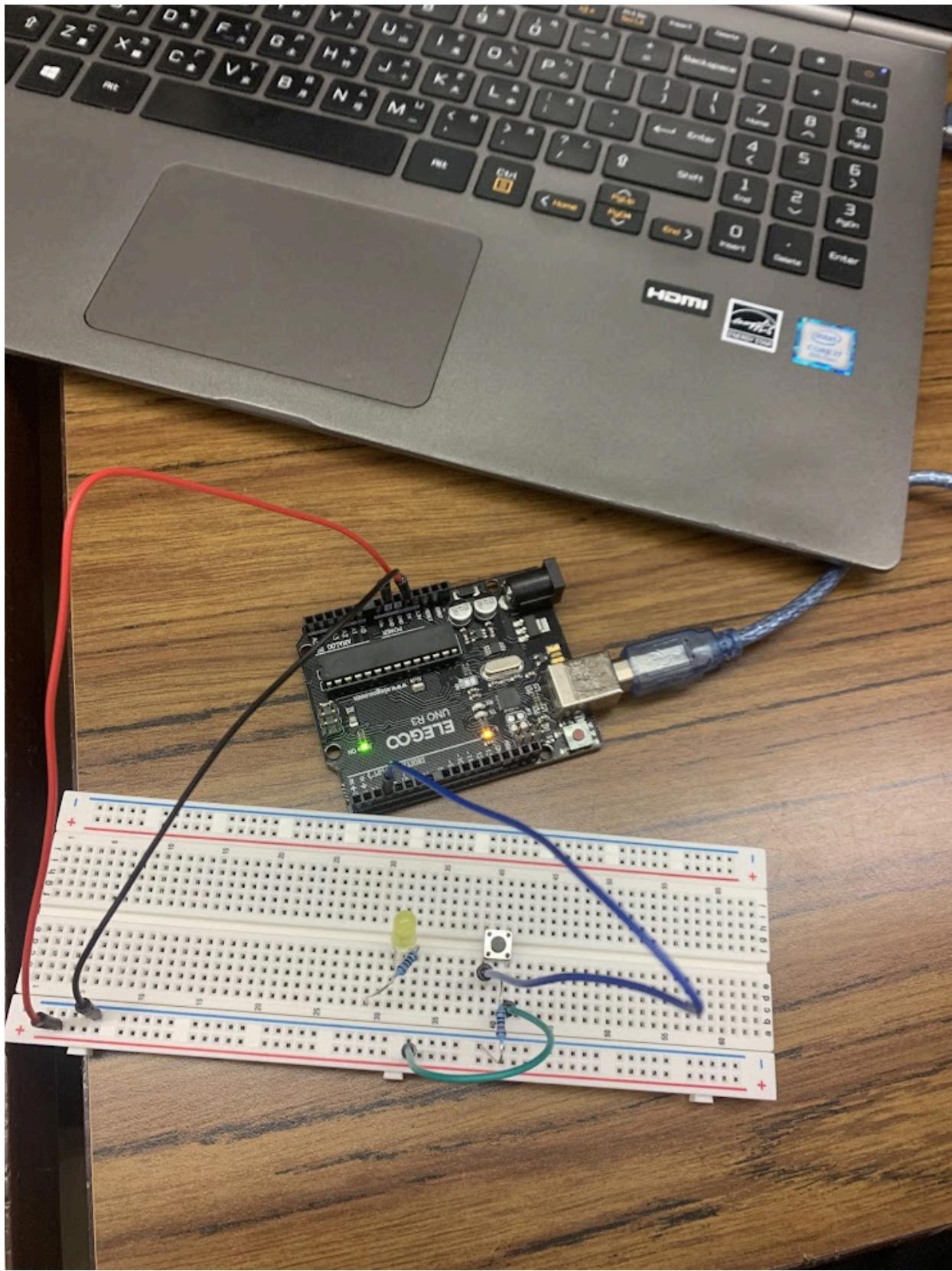
```
1  const int LEDpin = 8;
2  void setup() {
3      // put your setup code here, to run once:
4      pinMode(LEDpin, OUTPUT);
5  }
6
7
8  void loop() {
9      // put your main code here, to run repeatedly:
10     digitalWrite(LEDpin, HIGH);
11     delay(250);
12     digitalWrite(LEDpin, LOW);
13     delay(250);
14 }
15
```

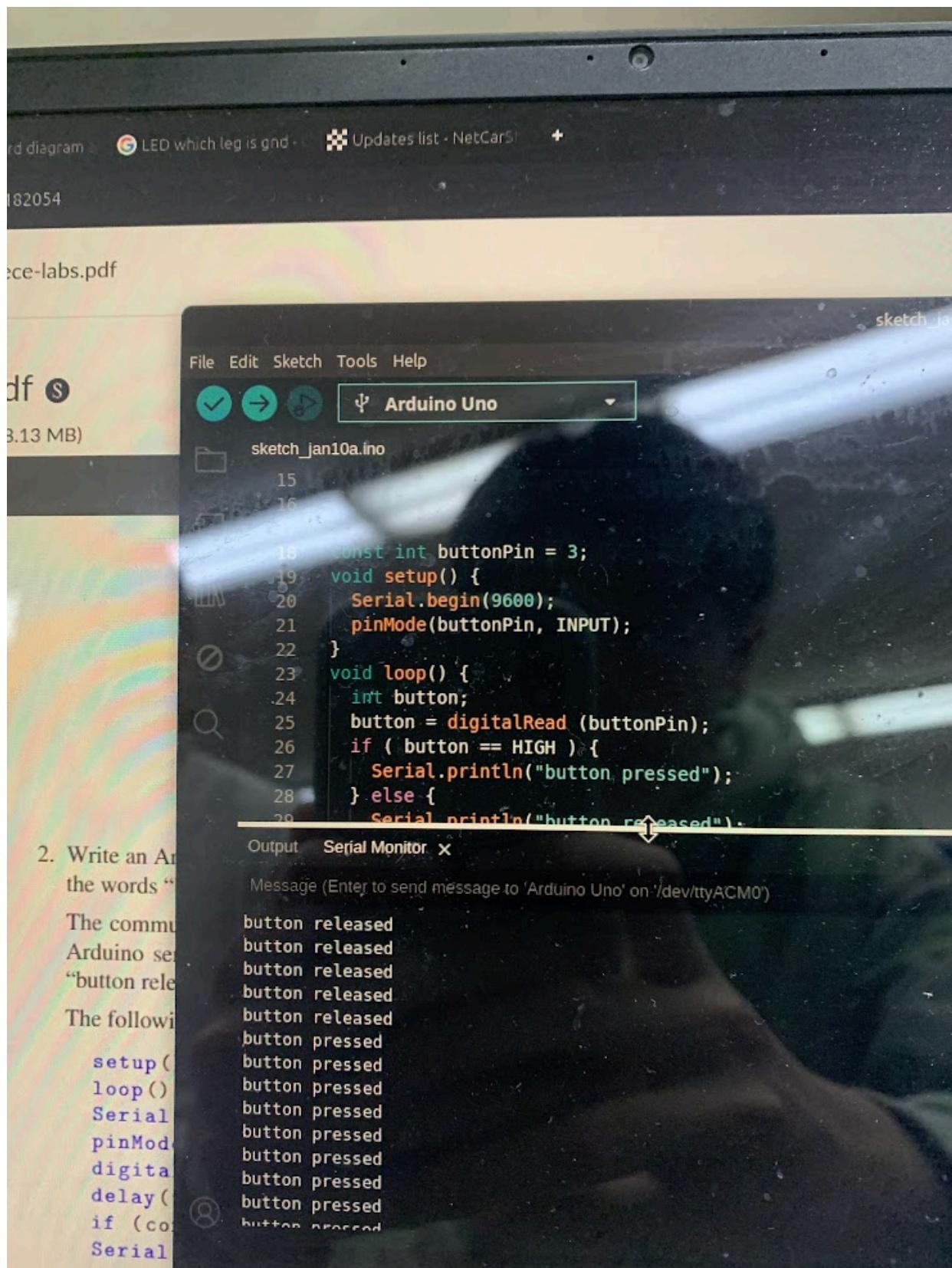
TASK 5



TASK 6:

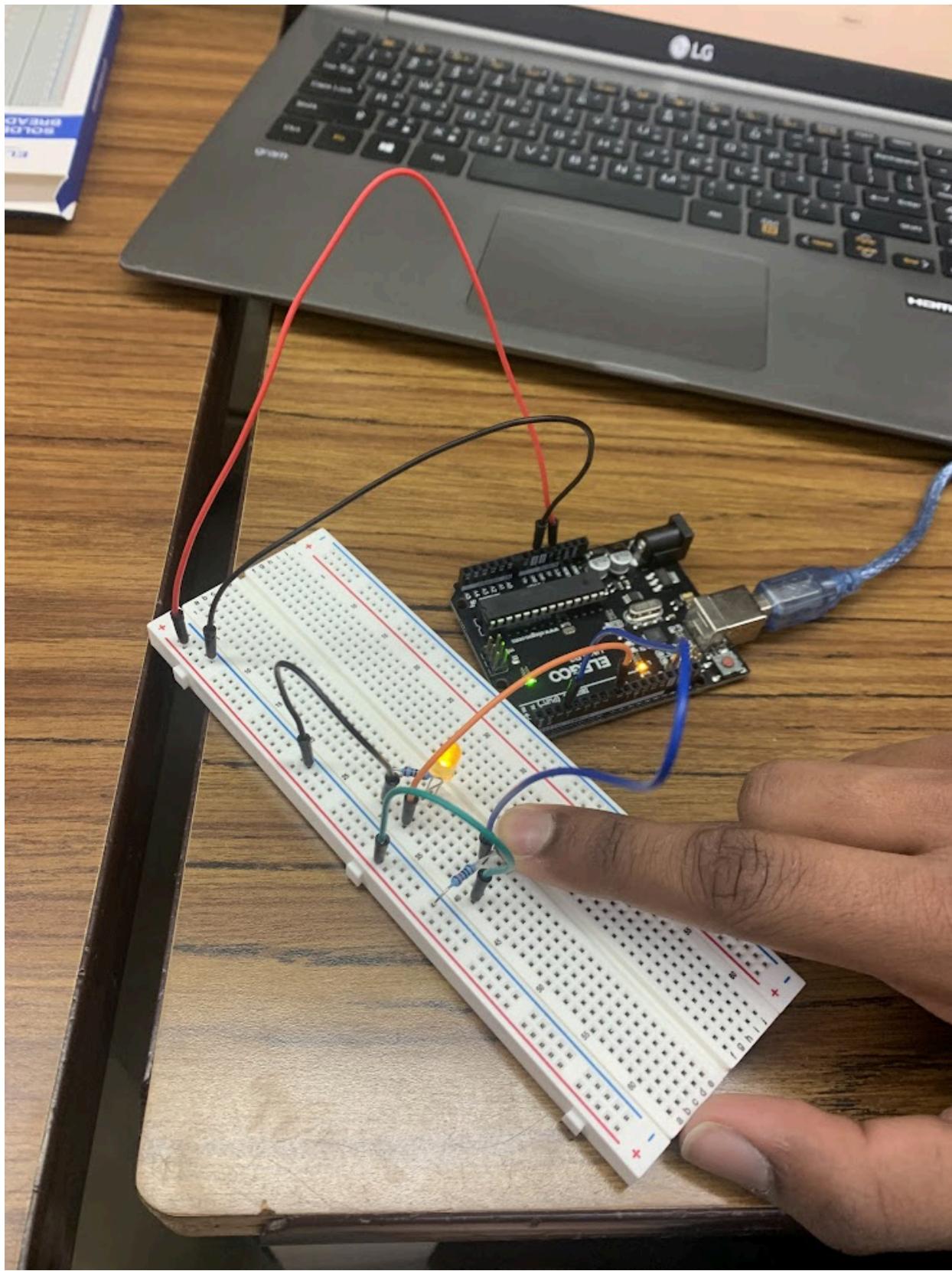
```
18 const int buttonPin = 3;
19 void setup() {
20     Serial.begin(9600);
21     pinMode(buttonPin, INPUT);
22 }
23 void loop() {
24     int button;
25     button = digitalRead (buttonPin);
26     if ( button == HIGH ) {
27         Serial.println("button pressed");
28     } else {
29         Serial.println("button released");
30     }
31     delay(100);
32 }
```





TASK #7:

```
36 const int buttonPin = 3;
37 const int LEDpin = 8;
38 void setup() {
39     pinMode(buttonPin, INPUT);
40     pinMode(LEDpin, OUTPUT);
41 }
42 void loop() {
43     int button;
44     button = digitalRead(buttonPin);
45     if (button == HIGH) {
46         digitalWrite(LEDpin, HIGH);
47     } else {
48         digitalWrite(LEDpin, LOW);
49     }
50     delay(100);
51 }
```

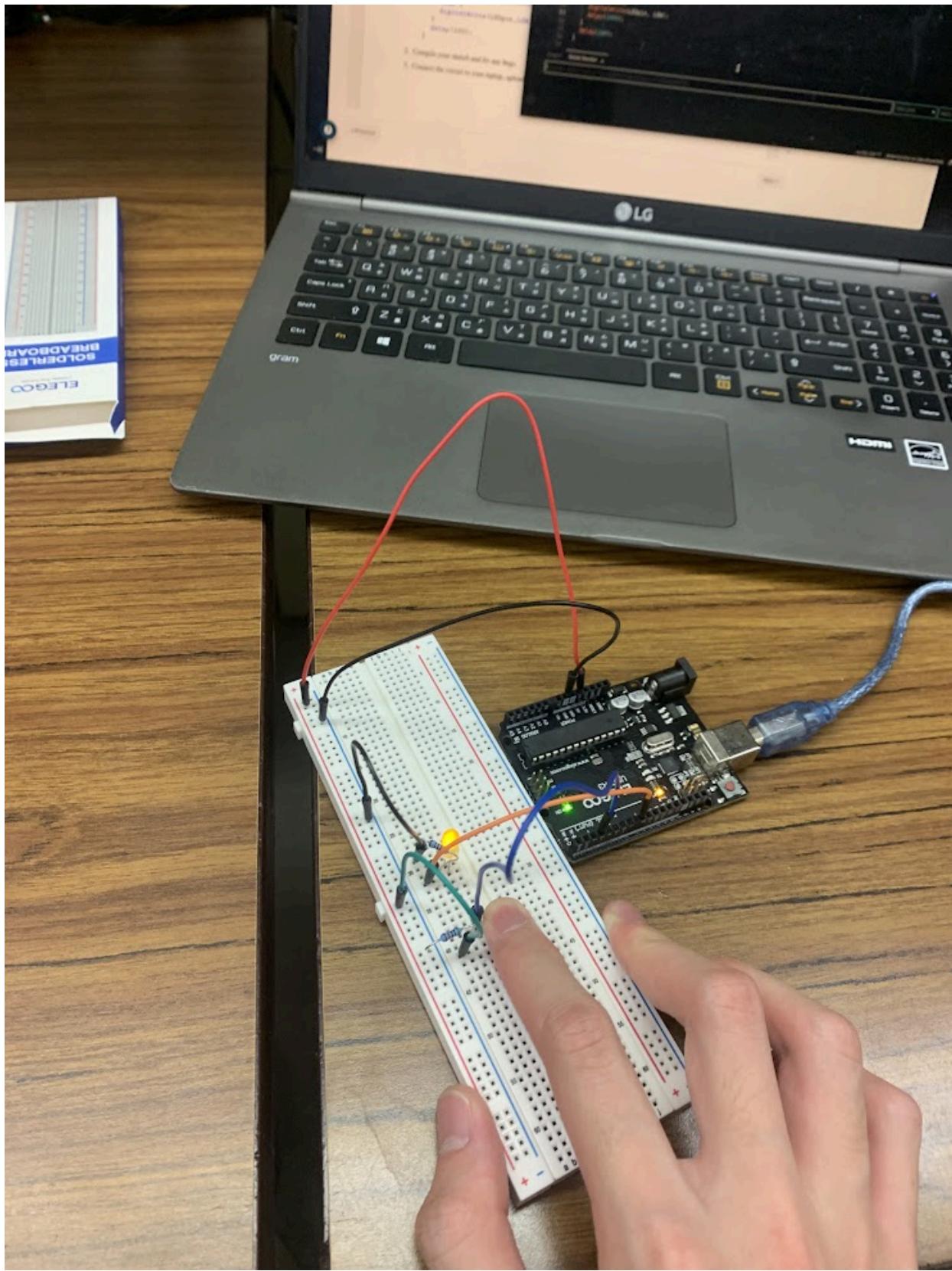


TASK #8:

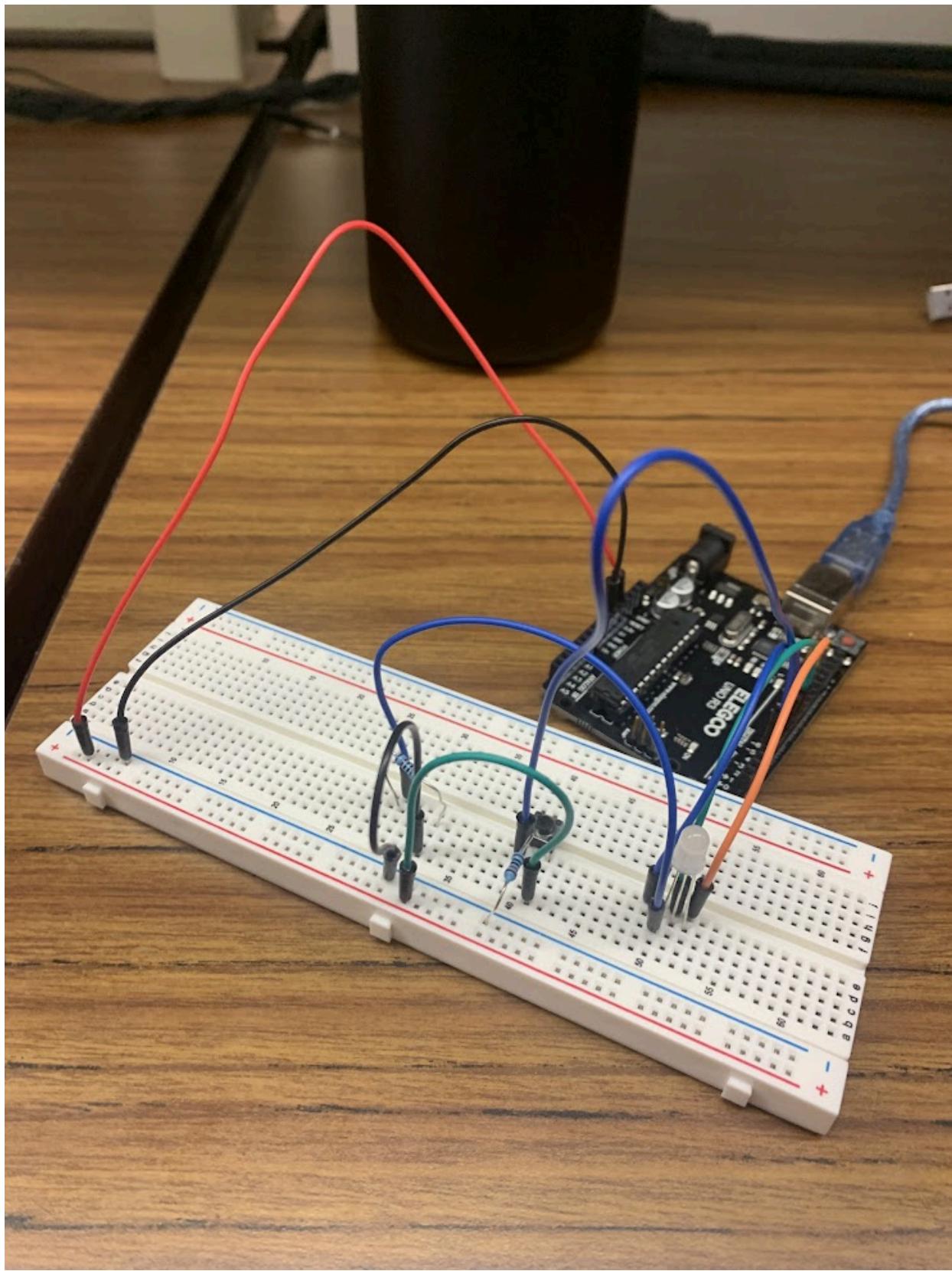
```
55 // TASK 8
56 const int buttonPin = 3;
57 const int LEDpin = 8;
58 void setup() {
59     pinMode(buttonPin, INPUT);
60     pinMode(LEDpin, OUTPUT);
61 }
62 void loop() {
63     int button;
64     button = digitalRead(buttonPin);
65     if (button == HIGH) {
66         digitalWrite(LEDpin, HIGH);
67         delay(500);
68         digitalWrite(LEDpin, LOW);
69         delay(500);
70     } else {
71         digitalWrite(LEDpin, HIGH);
72         delay(1000);
73         digitalWrite(LEDpin, LOW);
74         delay(1000);
75     }
76     delay(100);
77 }
```

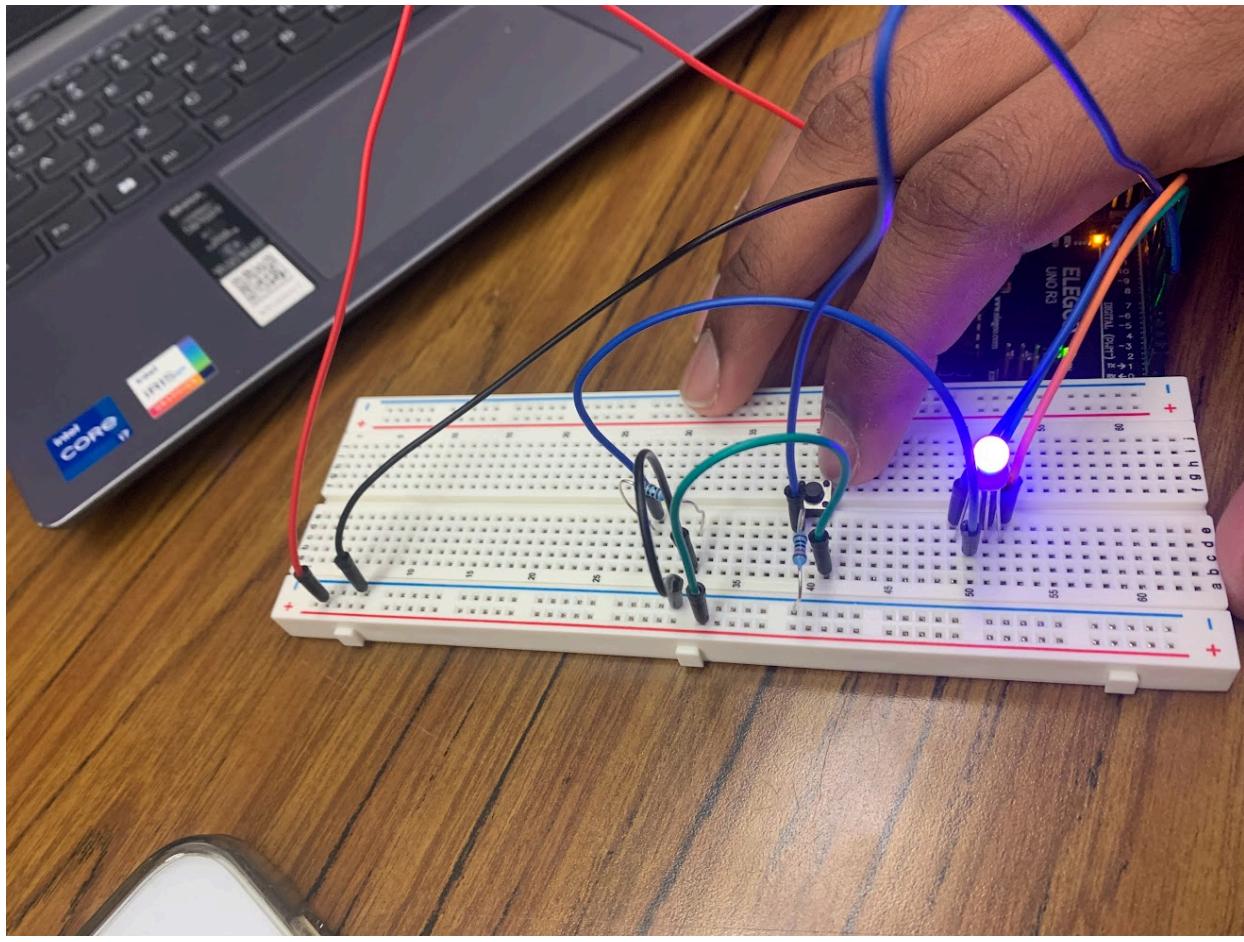
TASK #9:

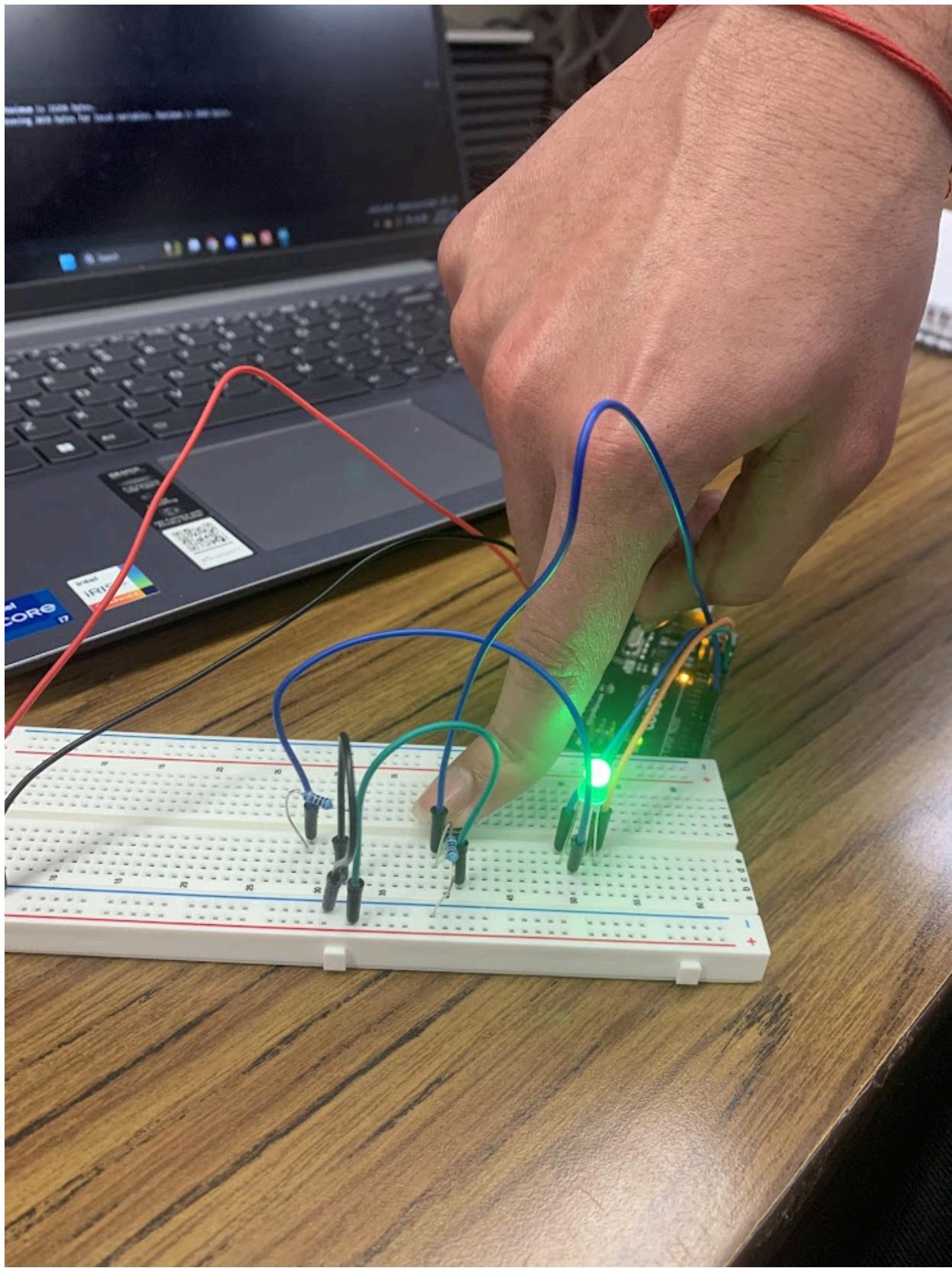
```
111 // TASK 9
112 const int buttonPin = 3;
113 const int LEDpin = 8;
114 int LEDstate;
115 int lastButton;
116
117 void setup() {
118     pinMode(buttonPin, INPUT);
119     pinMode(LEDpin, OUTPUT);
120     LEDstate = LOW;
121     digitalWrite(LEDpin, LEDstate);
122     lastButton = digitalRead(buttonPin);
123 }
124 void loop() {
125     int button;
126     button = digitalRead(buttonPin);
127     if (lastButton == LOW && button == HIGH) {
128         LEDstate = (LEDstate == LOW) ? HIGH : LOW;
129         digitalWrite(LEDpin, LEDstate);
130         delay(100);
131     }
132     lastButton = button;
133 }
```



TASK #10 CHALLENGE:







Color changes while the button is pressed. When button is released, the LED light color stays constant