

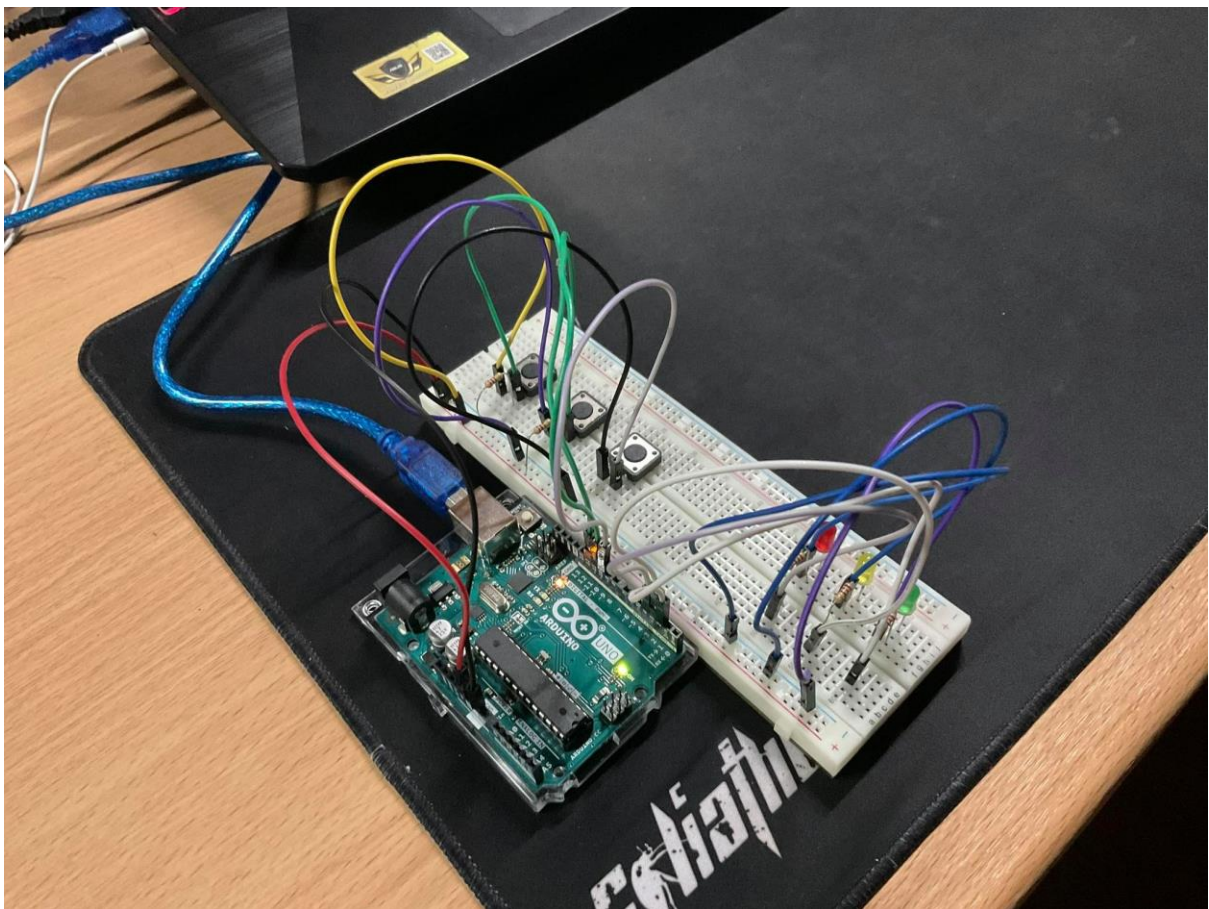
Assignment 2

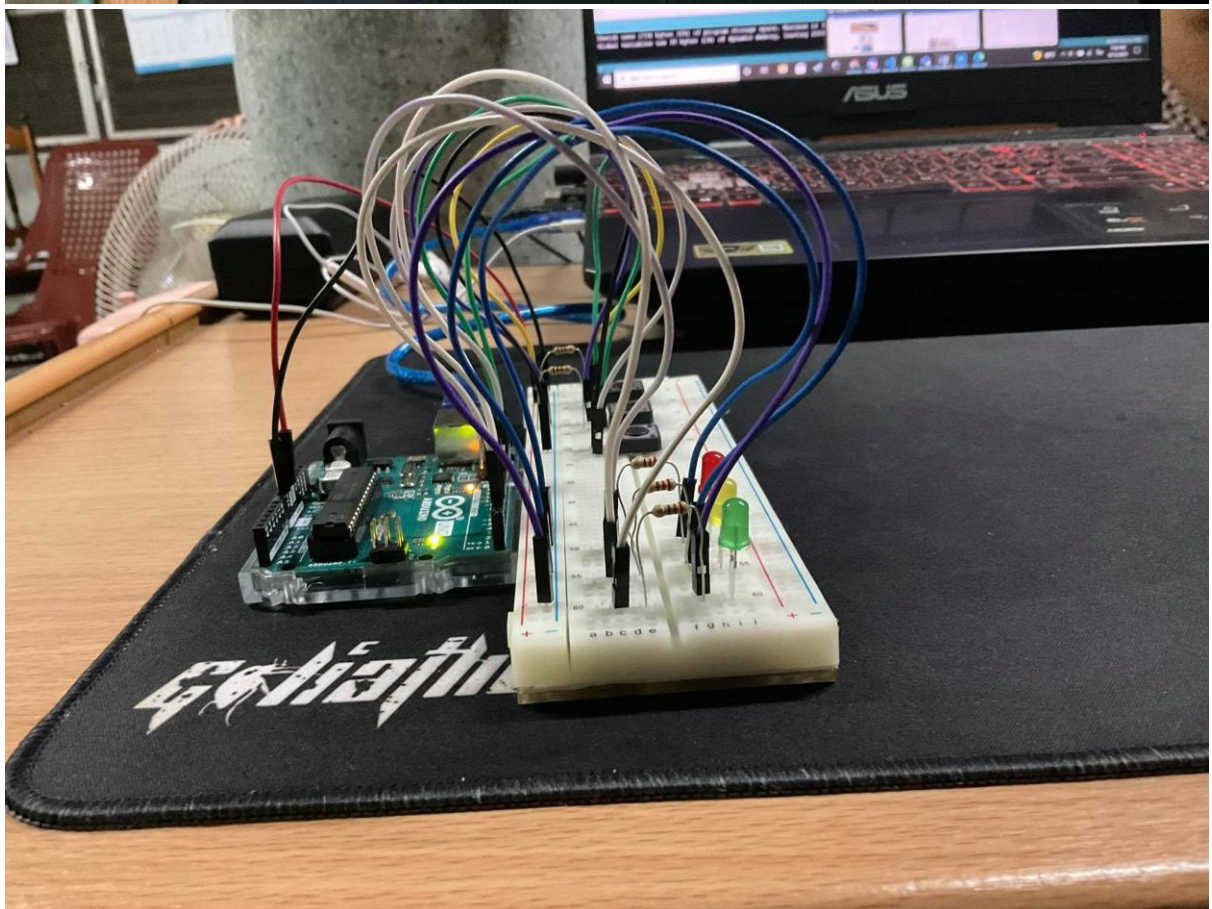
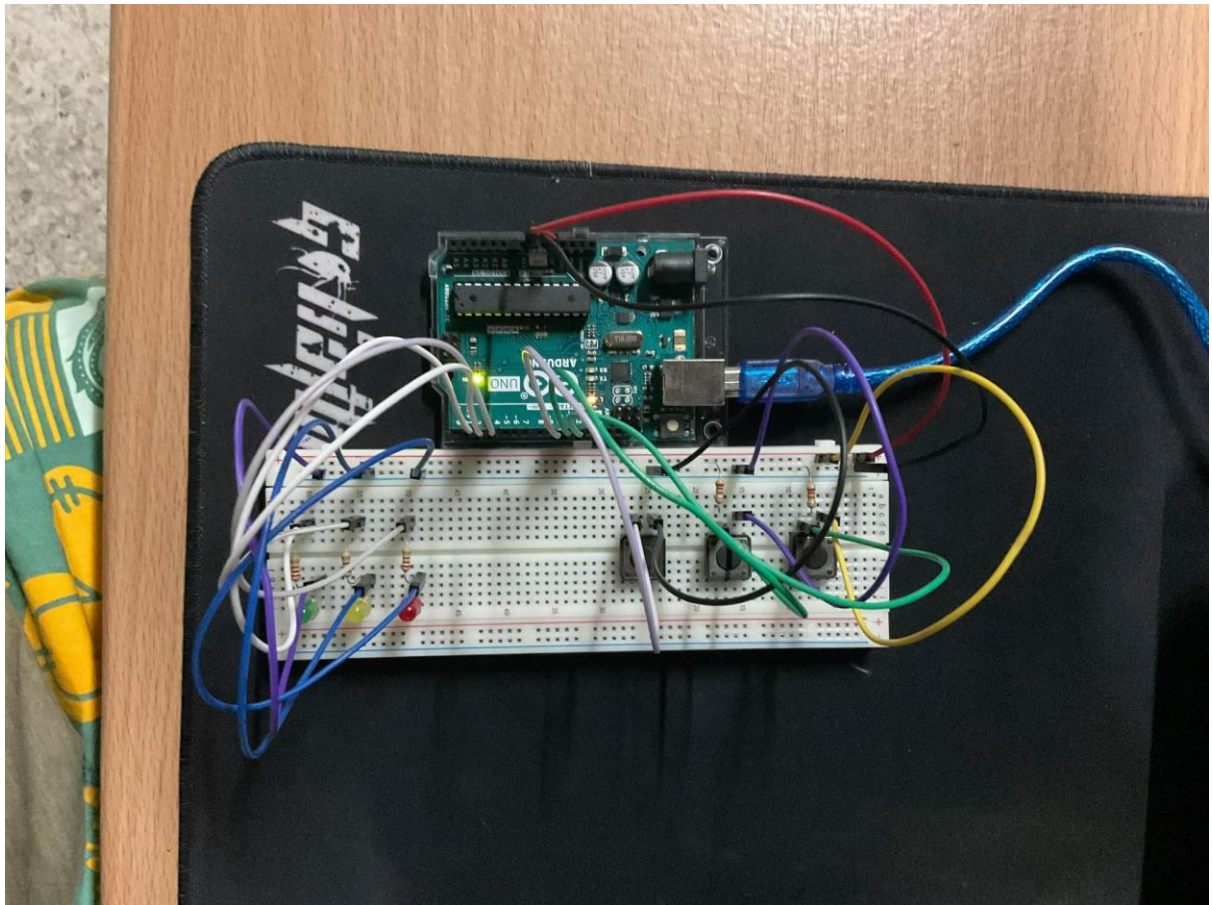
ชื่อกลุ่ม : 9 A.M.

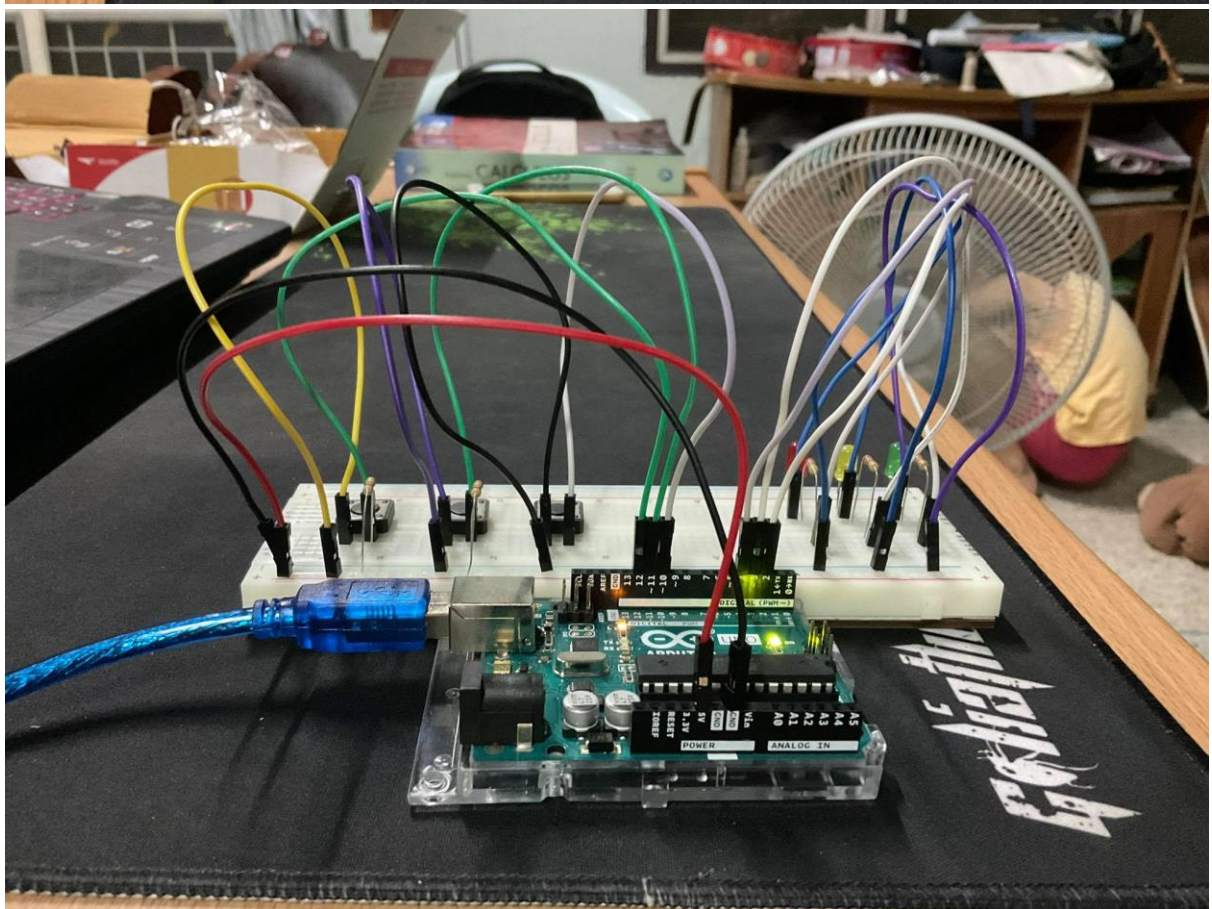
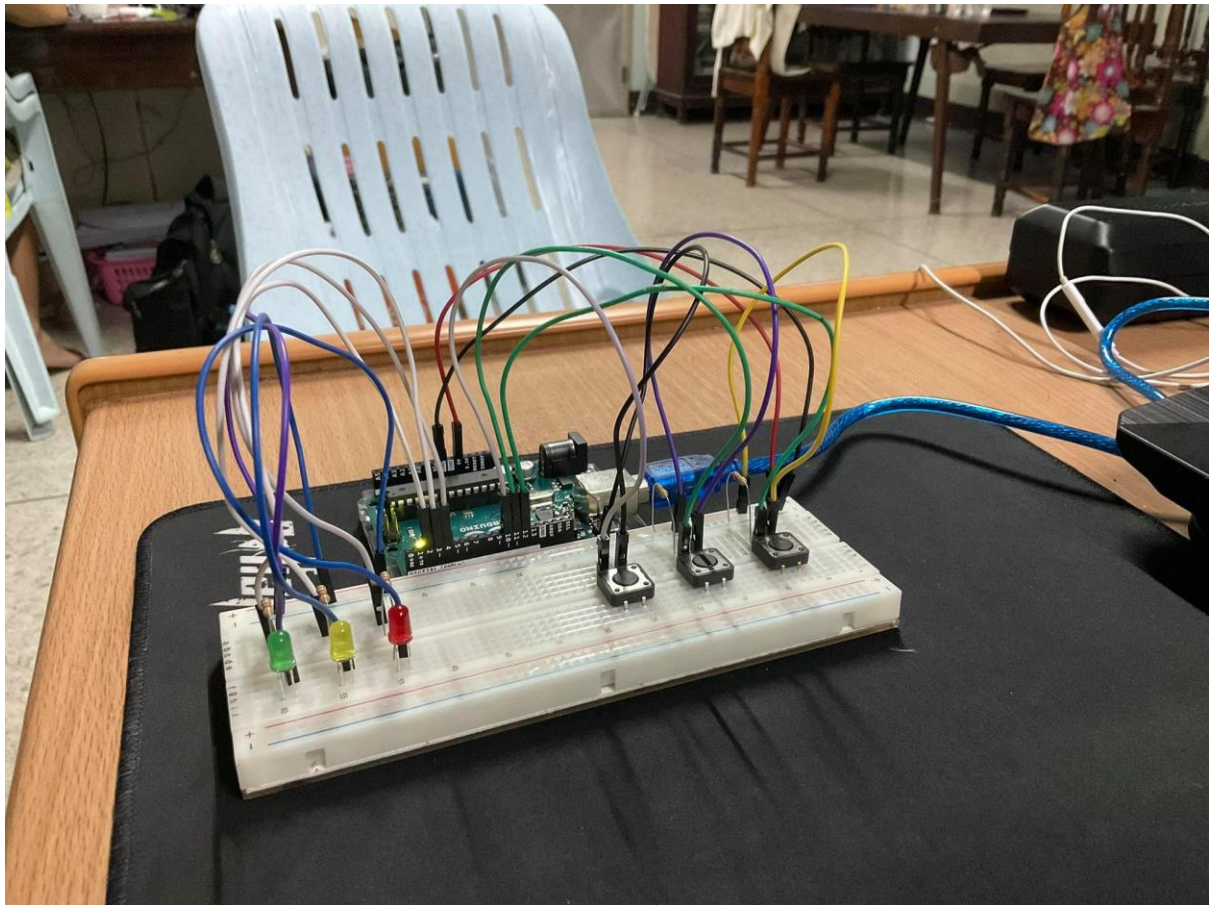
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ภาพถ่ายชิ้นงาน :







| บรรทัด | Code |
|--------|--|
| 1 | // C++ code |
| 2 | int red; |
| 3 | int yellow; |
| 4 | int green; |
| 5 | |
| 6 | long redtime, greentime; |
| 7 | |
| 8 | int stage = LOW, stage_g = LOW; |
| 9 | int pre_red = LOW, pre_green = HIGH; |
| 10 | long debounce = 250, time = 0, time_g = 0; |
| 11 | |
| 12 | |
| 13 | void setup() |
| 14 | { |
| 15 | pinMode(2, OUTPUT); |
| 16 | pinMode(3, OUTPUT); |
| 17 | pinMode(4, OUTPUT); |
| 18 | pinMode(12, INPUT); |
| 19 | pinMode(11, INPUT); |
| 20 | pinMode(10, INPUT_PULLUP); |
| 21 | } |
| 22 | |
| 23 | void loop() |
| 24 | { |
| 25 | red = digitalRead(12); |
| 26 | yellow = digitalRead(11); |
| 27 | green = digitalRead(10); |
| 28 | |

```
29   if (red == HIGH && pre_red == LOW && millis() - time > debounce)
30   {
31       redtime = millis();
32       if (stage == LOW)
33           stage = HIGH;
34       else
35           stage = LOW;
36       time = millis();
37       digitalWrite(4, stage);
38   }
39   pre_red = red;
40
41   if (millis() == redtime + 3000)
42   {
43       stage = LOW;
44       digitalWrite(4, stage);
45   }
46
47   if (green == LOW && pre_green == HIGH && stage == LOW && millis() -
48   time_g > debounce)
49   {
50       greentime = millis();
51       if (stage_g == LOW)
52           stage_g = HIGH;
53       else
54           stage_g = LOW;
55       time_g = millis();
56       digitalWrite(2, stage_g);
57   }
```

| | |
|----|--|
| 58 | pre_green = green; |
| 59 | if (millis() == greentime + 3000) |
| 60 | { |
| 61 | stage_g = LOW; |
| 62 | digitalWrite(2, stage_g); |
| 63 | } |
| 64 | |
| 65 | if (yellow == LOW && stage_g == LOW && stage == LOW) |
| 66 | { |
| 67 | for (int i = 1; i <= 4; i++) { |
| 68 | digitalWrite(3, HIGH); |
| 69 | delay(250); |
| 70 | digitalWrite(3, LOW); |
| 71 | delay(250); |
| 72 | } |
| 73 | } |
| 74 | } |
| 75 | |