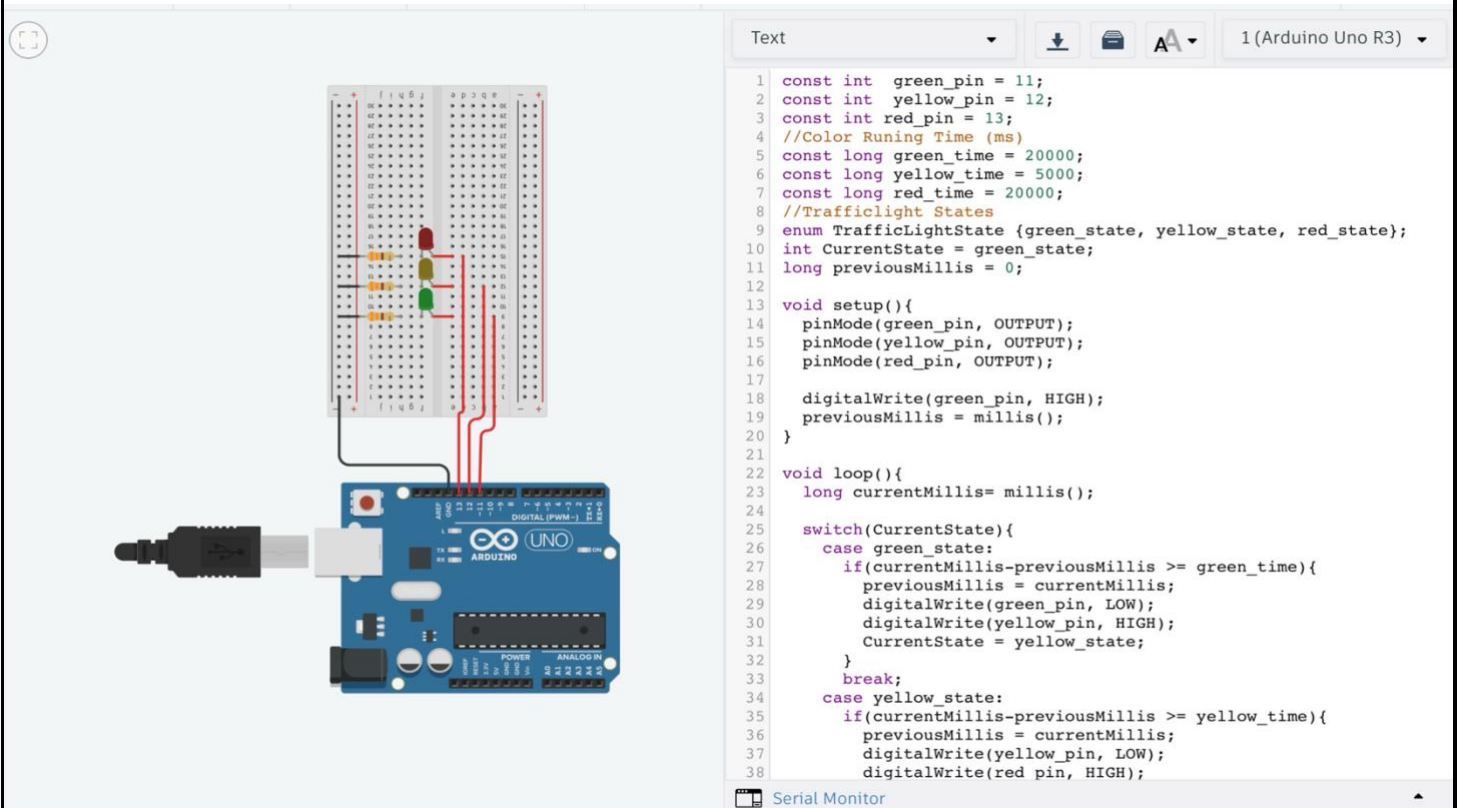


Arduino circuit simulation



```
1  const int green_pin = 11;
2  const int yellow_pin = 12;
3  const int red_pin = 13;
4  //Color Runing Time (ms)
5  const long green_time = 20000;
6  const long yellow_time = 5000;
7  const long red_time = 20000;
8  //Trafficlight States
9  enum TrafficLightState {green_state, yellow_state, red_state};
10 int CurrentState = green_state;
11 long previousMillis = 0;
12
13 void setup(){
14   pinMode(green_pin, OUTPUT);
15   pinMode(yellow_pin, OUTPUT);
16   pinMode(red_pin, OUTPUT);
17
18   digitalWrite(green_pin, HIGH);
19   previousMillis = millis();
20 }
21
22 void loop(){
23   long currentMillis= millis();
24
25   switch(CurrentState){
26     case green_state:
27       if(currentMillis-previousMillis >= green_time){
28         previousMillis = currentMillis;
29         digitalWrite(green_pin, LOW);
30         digitalWrite(yellow_pin, HIGH);
31         CurrentState = yellow_state;
32       }
33       break;
34     case yellow_state:
35       if(currentMillis-previousMillis >= yellow_time){
36         previousMillis = currentMillis;
37         digitalWrite(yellow_pin, LOW);
38         digitalWrite(red_pin, HIGH);
```

Designed by Tinkercad