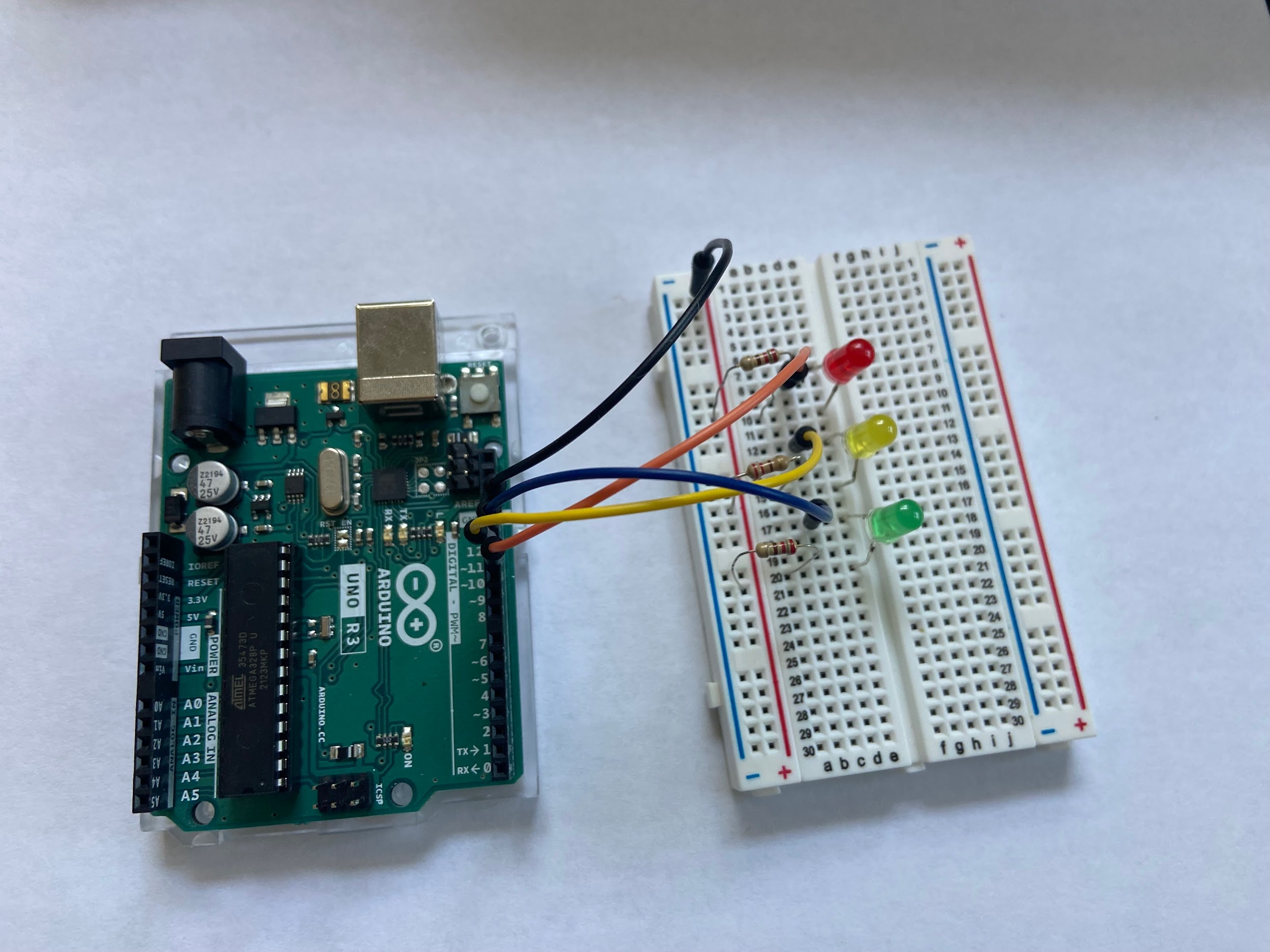
**Part 6A: Arduino Traffic Light Challenge Answers**

**Example of circuit** for running a stop light with breadboard and Arduino:



Red light—connected to pin 11

Yellow light—connected to pin 12

Green light—connected to pin 13

Black wire—connected to ground and red/+ on breadboard

**Example of coding for running a traffic light with Arduino:**

(Other possibilities exist. If the lights work, it’s good code!)

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Activity 6a: Traffic Light

Turn on a green external LED on for 5 seconds then off for 7 seconds, then a yellow external LED for two seconds then off for 10, then a red external LED turns on for 5 seconds then off for 7 seconds, repeatedly.

\*/

// Identify the digital pin to which each LED is connected:

int led = 11;//green light

int led2 = 12;//yellow light

int led3 = 13;//red light

// The setup() routine runs only once:

void setup() {

// Set the digital pin as an output.

pinMode(led, OUTPUT);

pinMode(led2, OUTPUT);

pinMode(led3, OUTPUT);

}

// The loop routine runs over and over again forever:

void loop() {

digitalWrite(led, HIGH);

digitalWrite(led2, LOW);

digitalWrite(led3, LOW);

delay(5000);

digitalWrite(led, LOW);

digitalWrite(led2, HIGH);

digitalWrite(led3, LOW);

delay(2000);

digitalWrite(led, LOW);

digitalWrite(led2, LOW);

digitalWrite(led3, HIGH);

delay(5000);

}