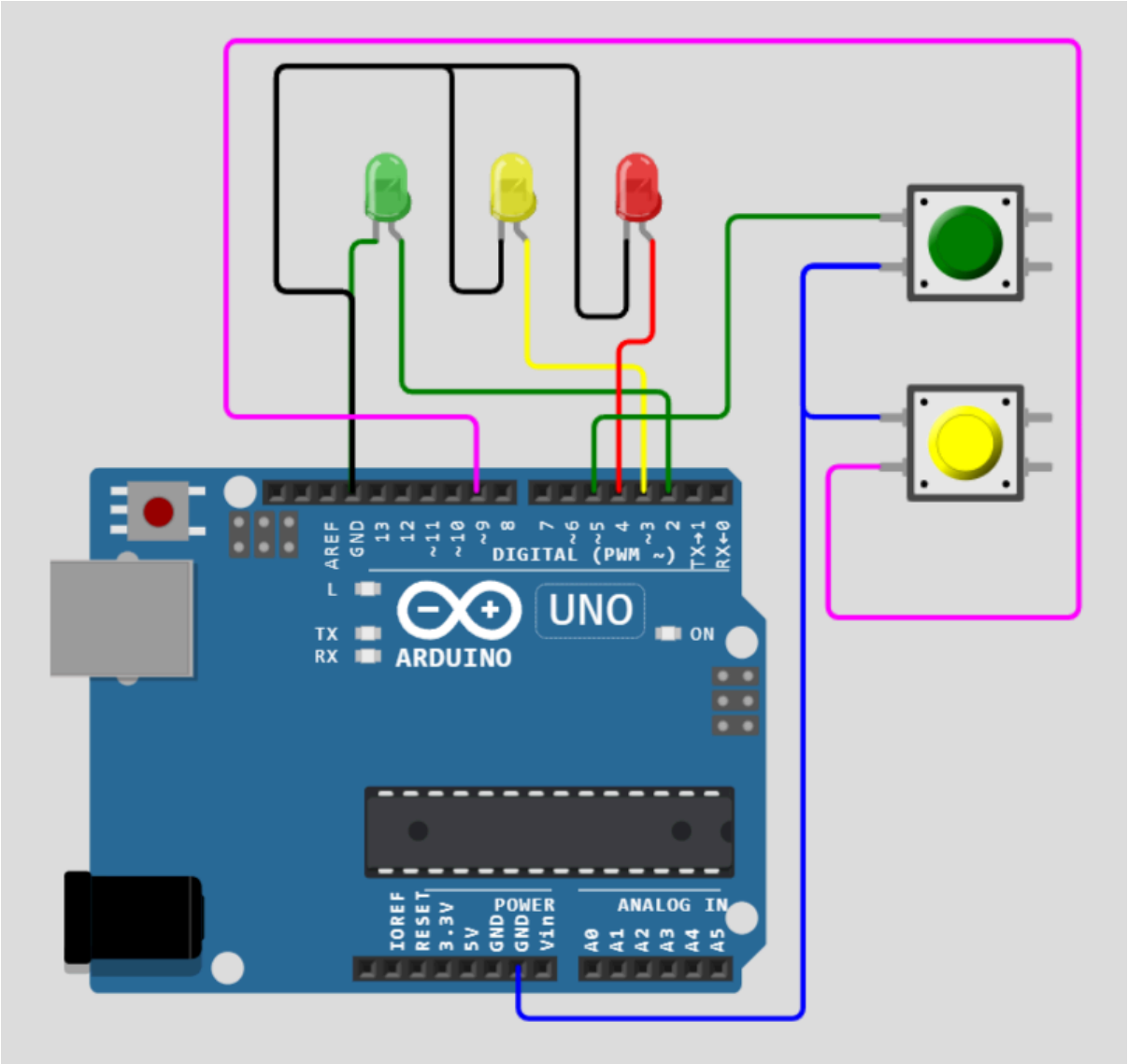


```
const int redPin = 4;
const int yellowPin = 3;
const int greenPin = 2;
const int buttonPin5 = 5;
const int buttonPin9 = 9;

bool normalTrafficLight = false;  // Variable to control normal traffic
light sequence

void setup() {
  pinMode(redPin, OUTPUT);
  pinMode(yellowPin, OUTPUT);
```

```
  pinMode(greenPin, OUTPUT);
  pinMode(buttonPin5, INPUT_PULLUP);
  pinMode(buttonPin9, INPUT_PULLUP);
}

void loop() {
  int buttonState5 = digitalRead(buttonPin5);
  int buttonState9 = digitalRead(buttonPin9);

  if (buttonState5 == LOW && !normalTrafficLight) {
    // Button 5 is pressed, start normal traffic light sequence
    normalTrafficLight = true;
    normalTrafficLightSequence();
  } else if (buttonState9 == LOW) {
    // Button 9 is pressed, blink red LED
    normalTrafficLight = false;
    blinkRed();
  }
}

void normalTrafficLightSequence() {
  while (normalTrafficLight) {
    // Green
    digitalWrite(greenPin, HIGH);
    digitalWrite(yellowPin, LOW);
    digitalWrite(redPin, LOW);
    delay(2000); // Green for 2 seconds

    // Yellow
    digitalWrite(greenPin, LOW);
    digitalWrite(yellowPin, HIGH);
    digitalWrite(redPin, LOW);
    delay(1000); // Yellow for 1 second

    // Red
    digitalWrite(greenPin, LOW);
    digitalWrite(yellowPin, LOW);
    digitalWrite(redPin, HIGH);
    delay(2000); // Red for 2 seconds
  }

  // Turn off all LEDs after normalTrafficLight is set to false
  digitalWrite(greenPin, LOW);
```

```
  digitalWrite(yellowPin, LOW);
  digitalWrite(redPin, LOW);
}

void blinkRed() {
  // Blinking Red
  for (int i = 0; i < 10; i++) {
    digitalWrite(greenPin, LOW);
    digitalWrite(yellowPin, LOW);
    digitalWrite(redPin, HIGH);
    delay(500); // Blink for 0.5 seconds

    digitalWrite(redPin, LOW);
    delay(500); // LED off for 0.5 seconds
  }

  // Turn off red LED after blinking
  digitalWrite(redPin, LOW);
}
```