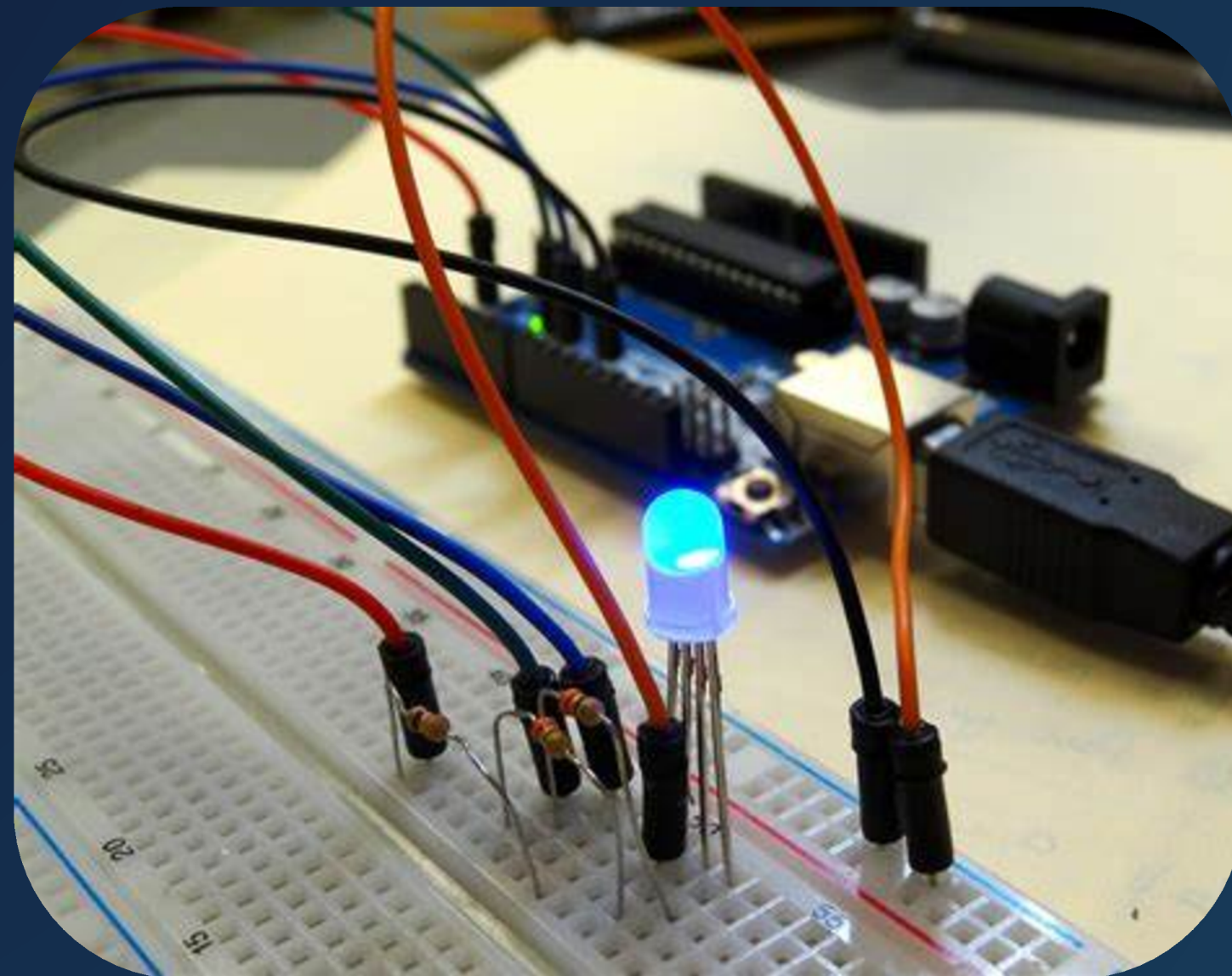
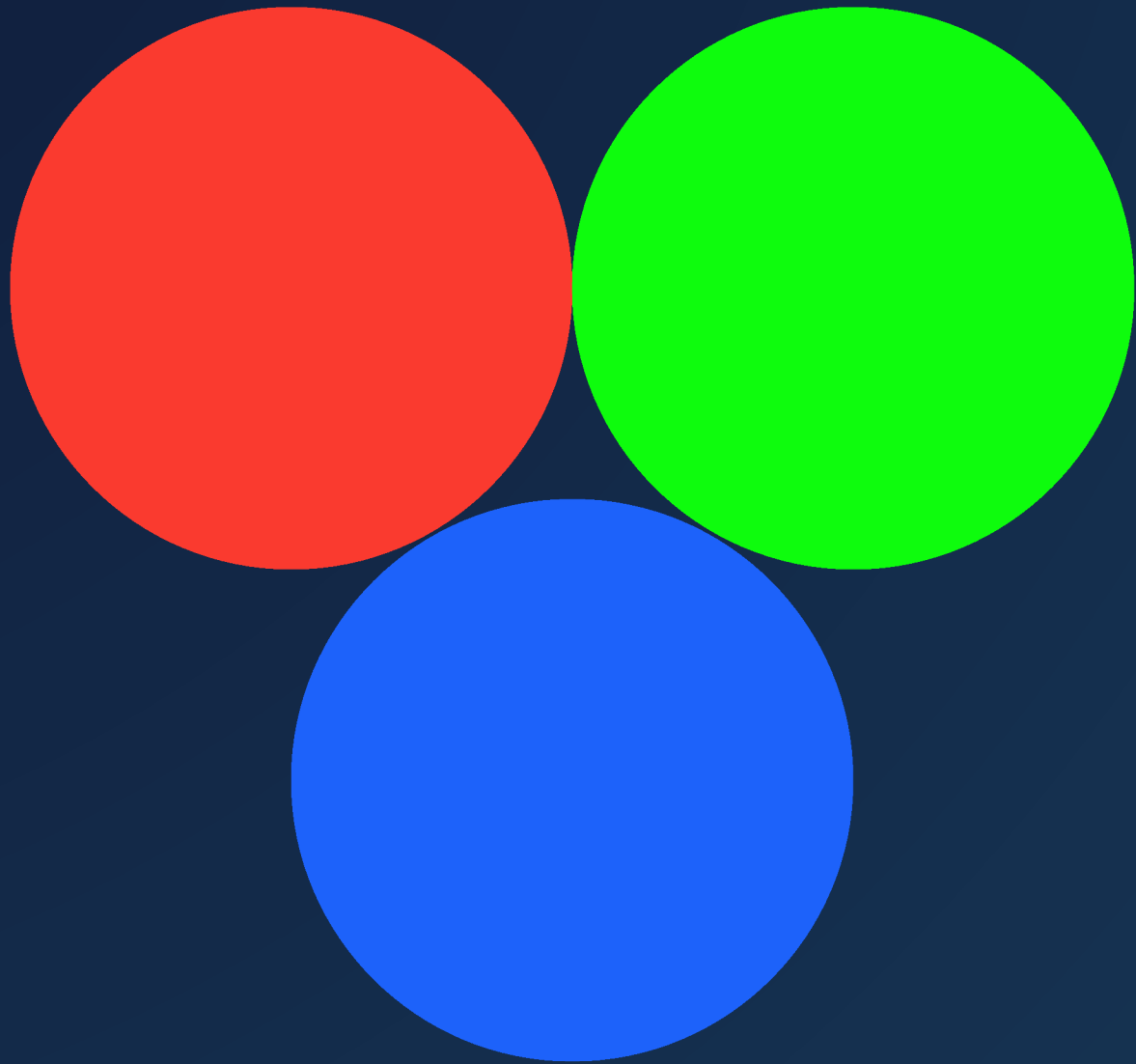


Arduino Experiment 2: RGB LED



Rose Barakat

WHAT IS RGB?



These three colors combine to create other colors by adjusting their intensity.

- Red: R
- Green: G
- Blue: B

- **"WHAT IS AN RGB LED?"**

RGB LEDs are special lights that can emit different colors by adjusting the brightness of each individual LED (red, green, blue).

- **Example: "By turning on all three LEDs (R, G, and B) at different intensities, we can create millions of colors."**



- **HOW RGB LEDs WORK
WITH ARDUINO"**

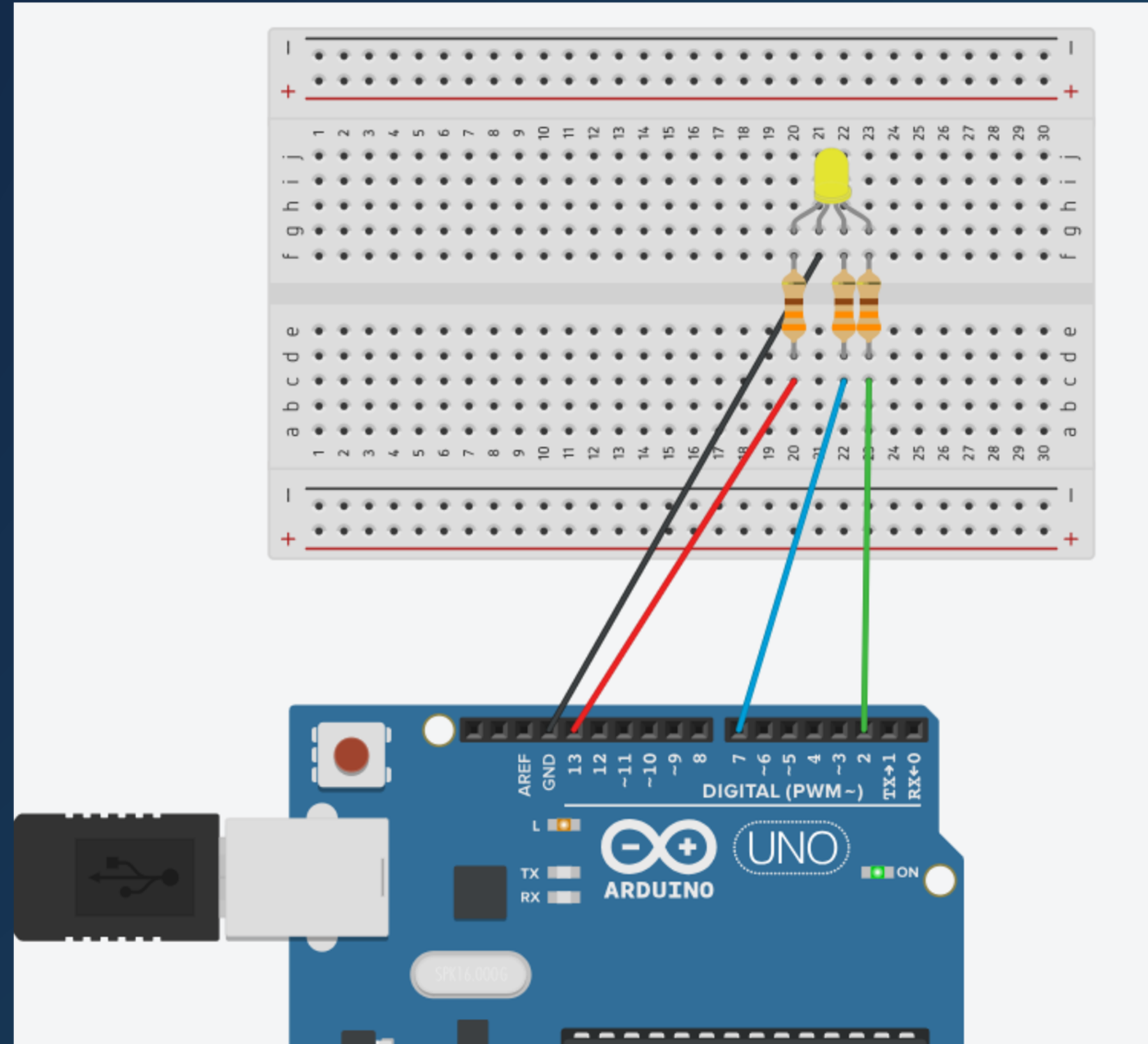
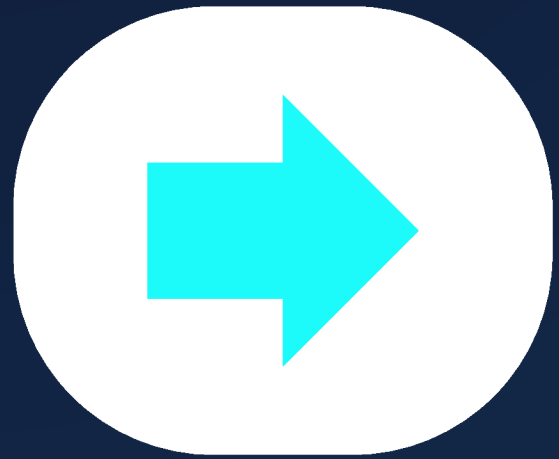
RGB LEDs have 4 pins:

Common Cathode (Ground), Red Pin, Green Pin and Blue Pin

- **"Each pin can be controlled by the Arduino to adjust the brightness of the color."**



THE CIRCUIT



CODE PART

```
void setup()
{
  pinMode(2, OUTPUT);
  pinMode(7, OUTPUT);
  pinMode(13, OUTPUT);
}
```

```
void loop()
{
  analogWrite(2,255);
  analogWrite(7,0);
  analogWrite(13,255);
  delay(1000);

  analogWrite(2, 0);
  analogWrite(7, 255);
  analogWrite(13, 0);
  delay(1000);

  analogWrite(2, 0);
  analogWrite(7, 0);
  analogWrite(13, 255);
  delay(1000);
}
```

