Two color LED module

Two color LED module for Arduino, emits red and green light. You can adjust the amount of each color using PWM.

This module consist of a common cathode 3mm or 5mm red/green LED. Since operating voltage is 2.0v ~2.5V, you'll need to use limiting resistors to prevent burnout when connecting to the Arduino.

Operating Voltage	2.0v ~ 2.5v
Using Current	10mA
Diameter	3mm / 5mm
Package Type	Diffusion
Color	Red + Green
Beam Angle	150
Wavelength	571nm + 644nm
Luminosity Intensity	20-40; 40-80

Pinout and Connection to Arduino

We'll use a couple of 330Ω resistors to limit the current from the Arduino and prevent burning the LED.

Module	Breadboard	Arduino
G	330Ω resistor	Pin 10
R	330Ω resistor	Pin 11
Y		GND
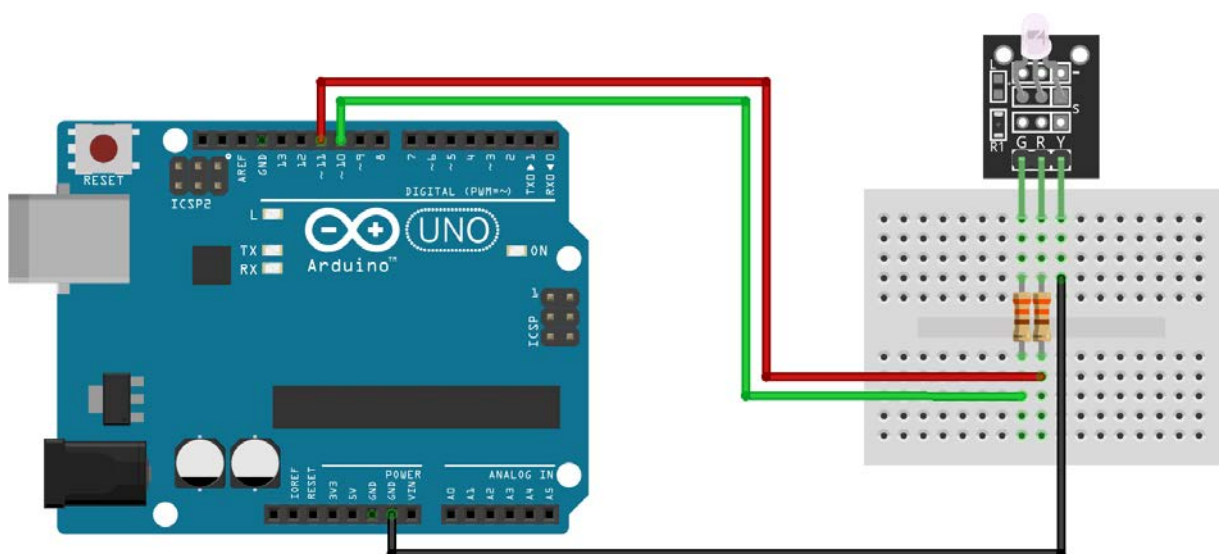
Arduino Example Sketch

The following Arduino sketch will gradually alternate between red and green color.

```c
int redpin = 11; // pin for red signal
int greenpin = 10; // pin for green signal
int val;

void setup() {
        pinMode(redpin, OUTPUT);
        pinMode(greenpin, OUTPUT);
}

void loop() {
        for(val = 255; val > 0; val--) {
                analogWrite(redpin, val); //dim red
                analogWrite(greenpin, 255 - val); // brighten green
                delay(15);
        }
        for(val = 0; val < 255; val++) {
                analogWrite(redpin, val); //brighten red
                analogWrite(greenpin, 255 - val); //dim green
                delay(15);
        }
}
```