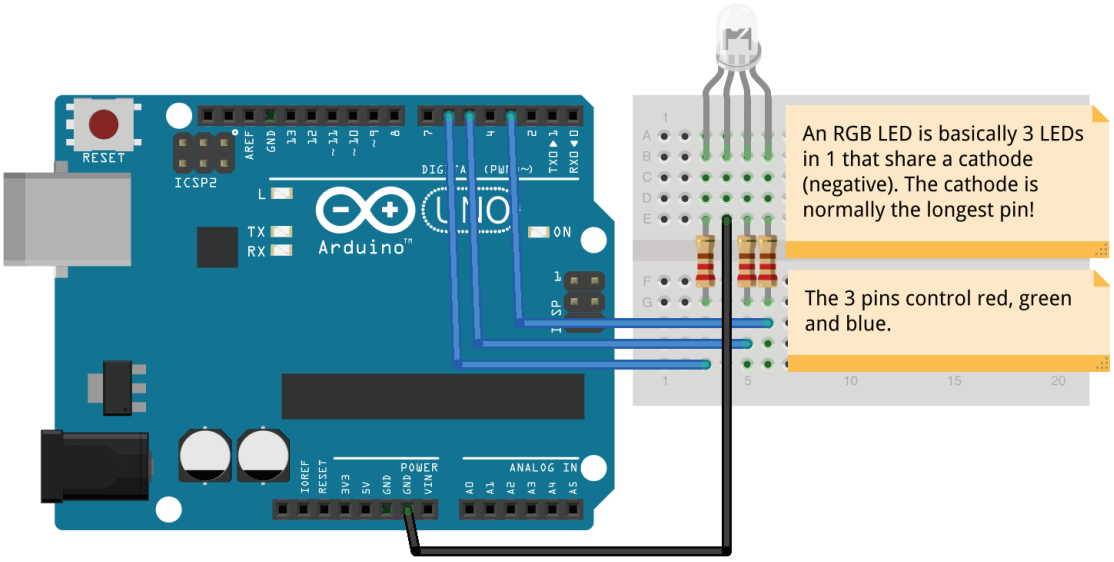
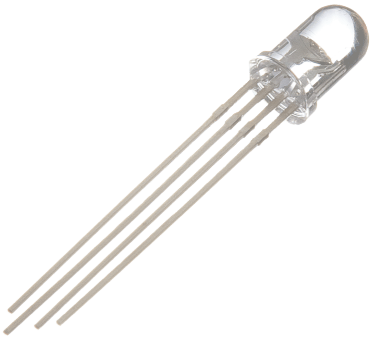
2 RGB LEDs

Basic Information

An **RGB LED** is basically 3 **LED**s in 1. A red, green and blue **LED**. These can be controlled independently to create multiple colours.
RGB LEDs have 4 legs, 1 for a shared ground and the other 3 are for the 3 colours.
With a "common **cathode" RGB LED**, the **ground** leg is always the longest.
To use an **RGB LED**, you require 3 **resistors**, one for each colour leg.

x3 220 ohm resistor





RGB LED

LED brightness

You can use **digitalWrite** like you did in the **LED** exercise to turn on the **LED** full power, but what if there was a way to turn it on 50%... Or 75%?
It just happens, there is. It is called **PWM** (Pulse Width Modulation). It really simply means it turns on the pins on and off 1000s of times a second.
In **Arduino** it is called, **analogWrite**. The only difference from **digitalWrite** is you feed it a value between 0 and 256 which is its brightness level.

Now try

1. Figure out which pin is which colour
2. Create purple and yellow.
3. Create a light show! (Hint - You can string as many "set analog pins" after each other with delays)