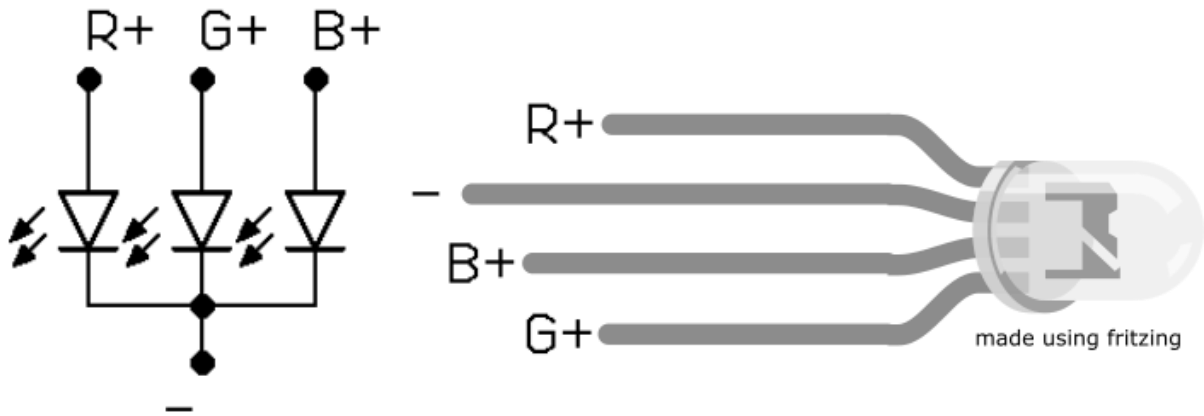
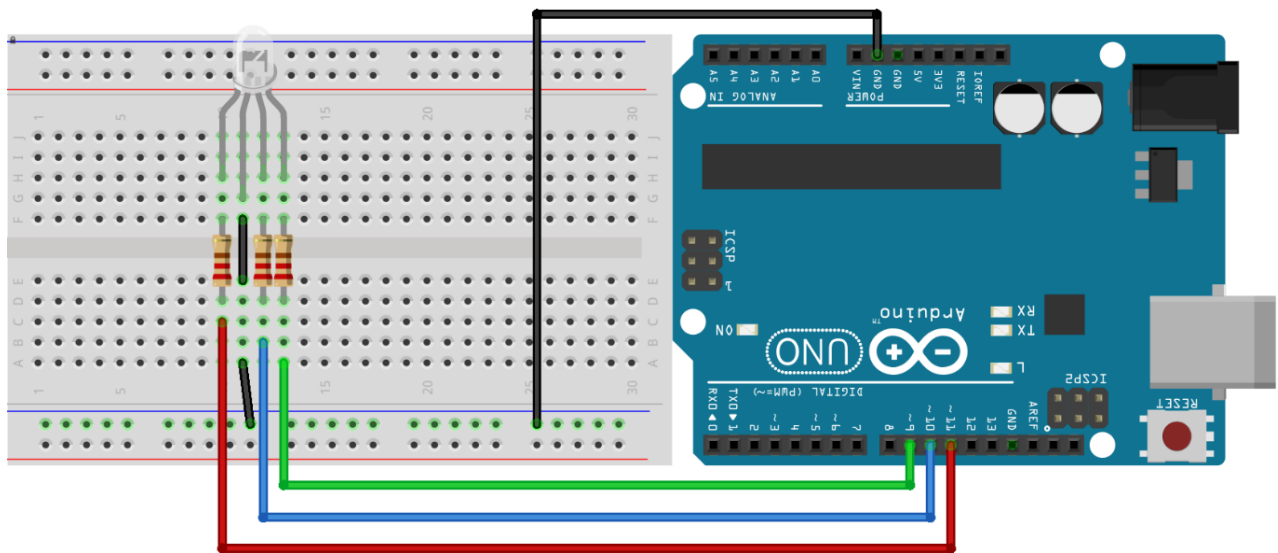
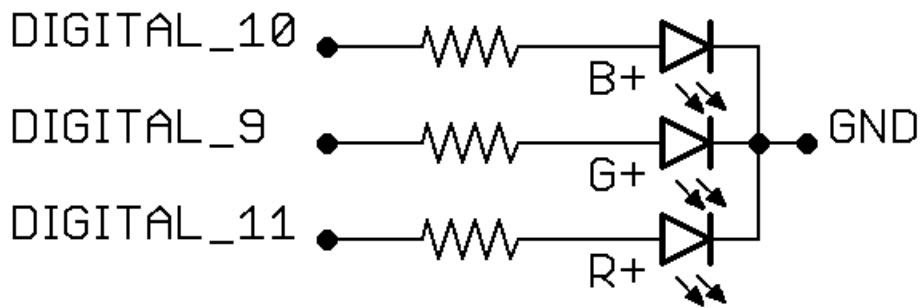


Activity 3 – RGB LEDs Using Arduino

We are going to use the Arduino to control three colours in a single LED: Red, Green, and Blue.



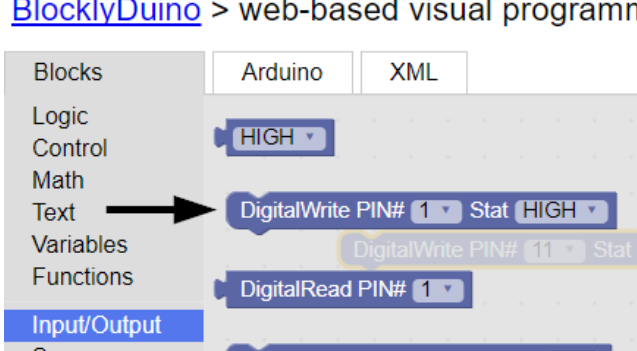

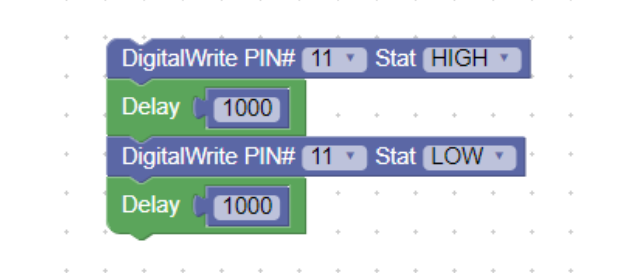
Circuit Diagram and Breadboard



fritzing

Programming the Arduino UNO using BlocklyDuino

We want to make a program that will blink each colour, first RED, then GREEN, then BLUE. To do this we will use the DigitalWrite and Delay functions

 <p>Blocks: Arduino, XML Logic: HIGH Control: DigitalWrite PIN# 1 Stat HIGH Math: DigitalWrite PIN# 11 Stat Text: DigitalRead PIN# 1 Variables: Input/Output</p>	<p>DigitalWrite allows us to set a pin as HIGH (5V) or LOW (0V)</p>
 <p>Blocks: Arduino, XML Logic: Delay 1000 Control: Delay 1000 Math:</p>	<p>Delay will make the Arduino wait for a number of milliseconds. There are 1000 milliseconds in one second.</p>
 <p>DigitalWrite PIN# 11 Stat HIGH Delay 1000 DigitalWrite PIN# 11 Stat LOW Delay 1000</p>	<p>This program will blink a single LED attached to pin 11. How can we change this to blink three lights?</p>

When you are ready to upload the program to the Arduino, ask for help.

Ideas, Questions, Notes