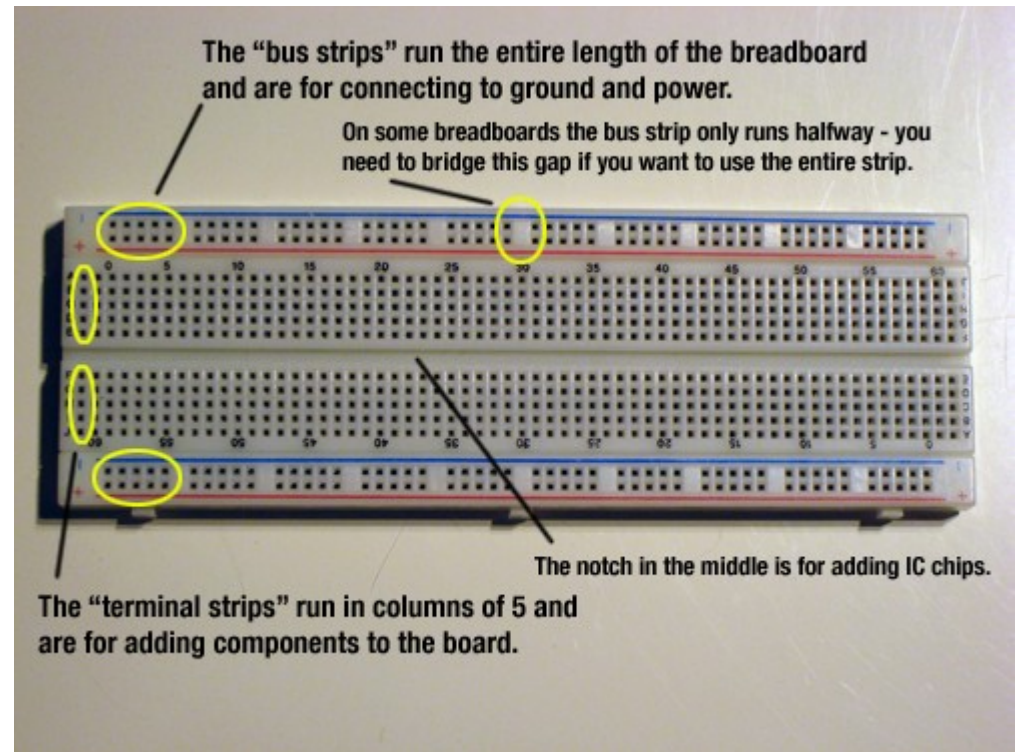
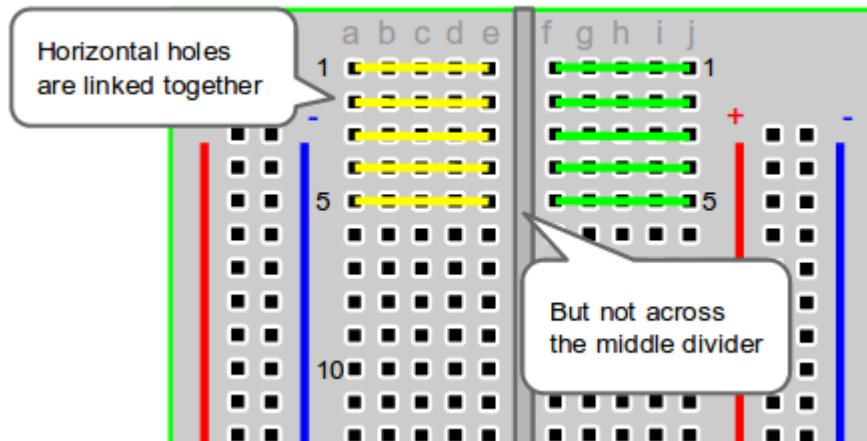
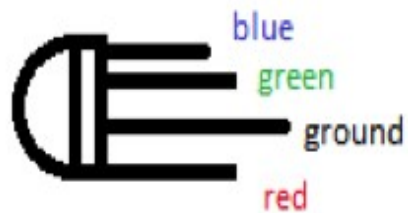


Breadboard

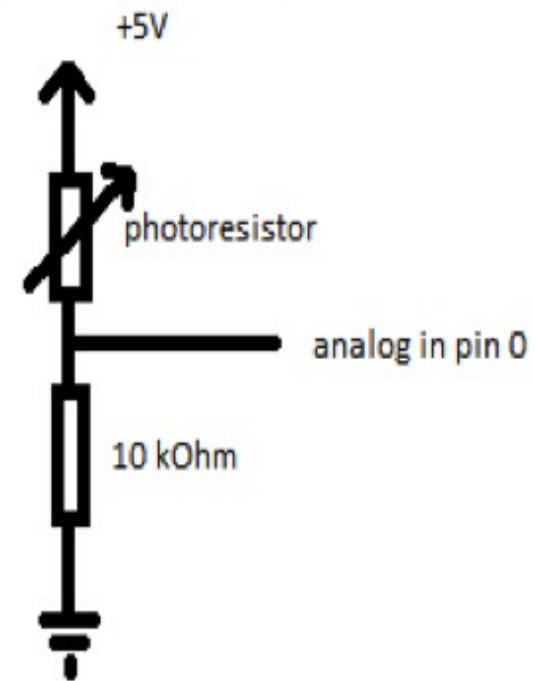


LEDs and Voltage Dividers

LED setup

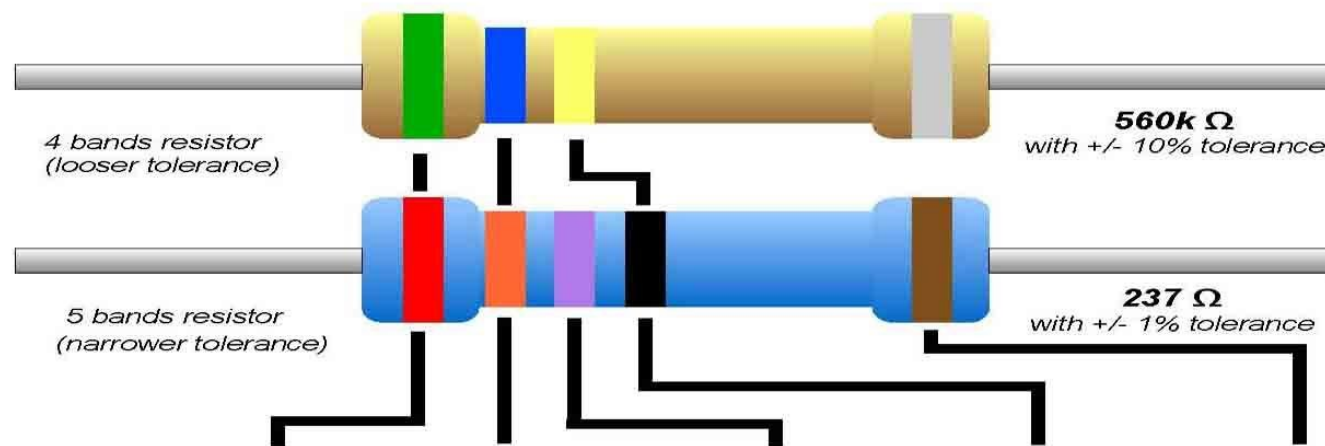


Photoresistor setup



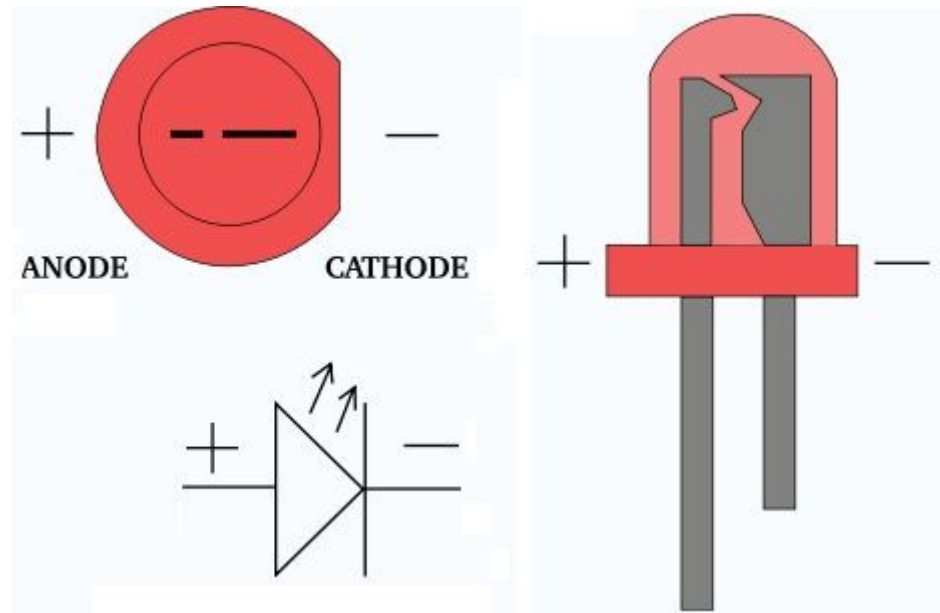
Resistors!

Resistor Color Code



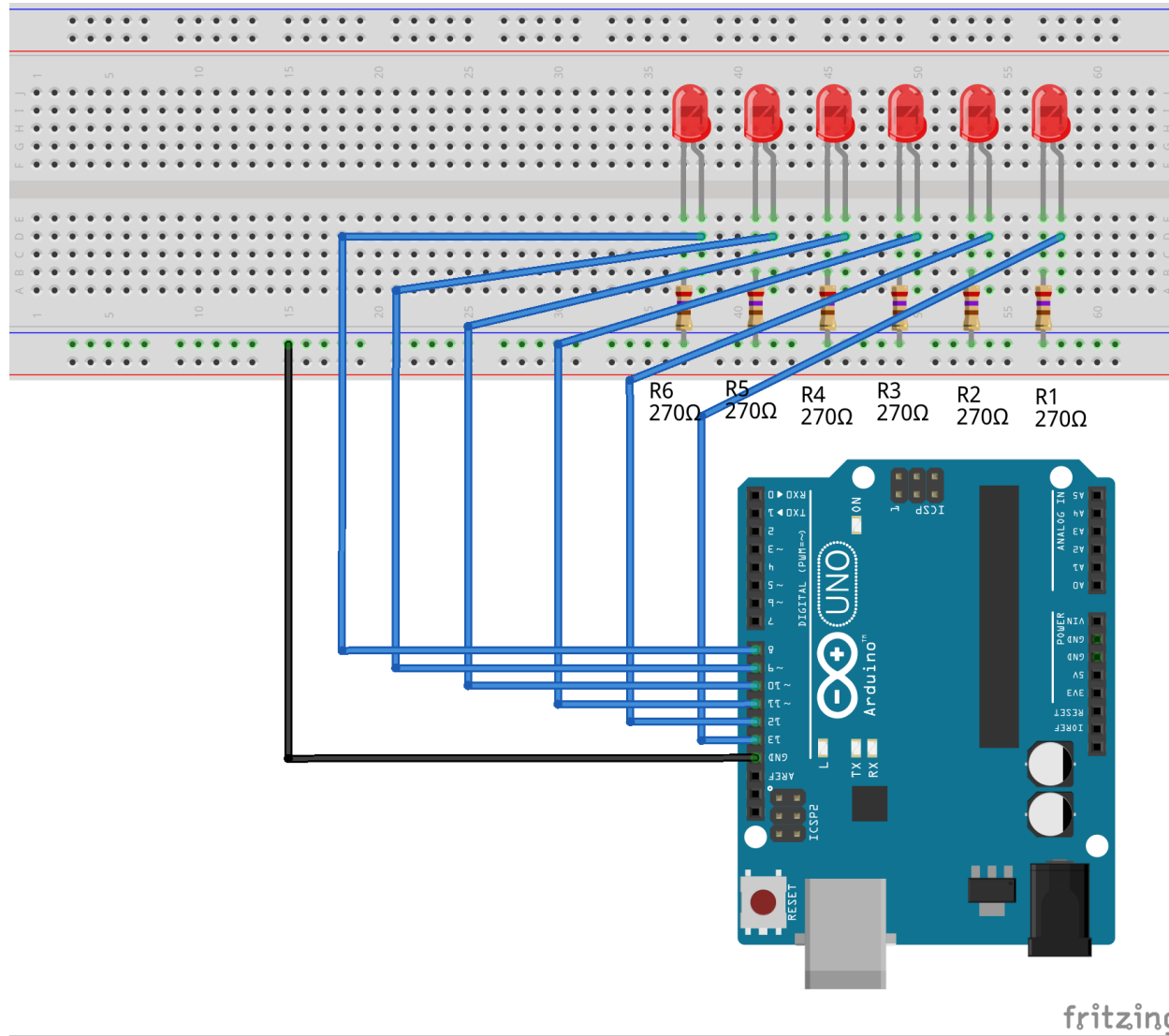
Color	1 st Band	2 nd Band	3 rd Band	Multiplier	Tolerance
Black	0	0	0	$\times 1 \Omega$	
Brown	1	1	1	$\times 10 \Omega$	+/- 1%
Red	2	2	2	$\times 100 \Omega$	+/- 2%
Orange	3	3	3	$\times 1K \Omega$	
Yellow	4	4	4	$\times 10K \Omega$	
Green	5	5	5	$\times 100K \Omega$	+/- .5%
Blue	6	6	6	$\times 1M \Omega$	+/- .25%
Violet	7	7	7	$\times 10M \Omega$	+/- .1%
Grey	8	8	8		+/- .05%
White	9	9	9		
Gold				$\times .1 \Omega$	+/- 5%
Silver				$\times .01 \Omega$	+/- 10%

More LEDs



<http://www.instructables.com/id/LED-Polarity-Tester/>

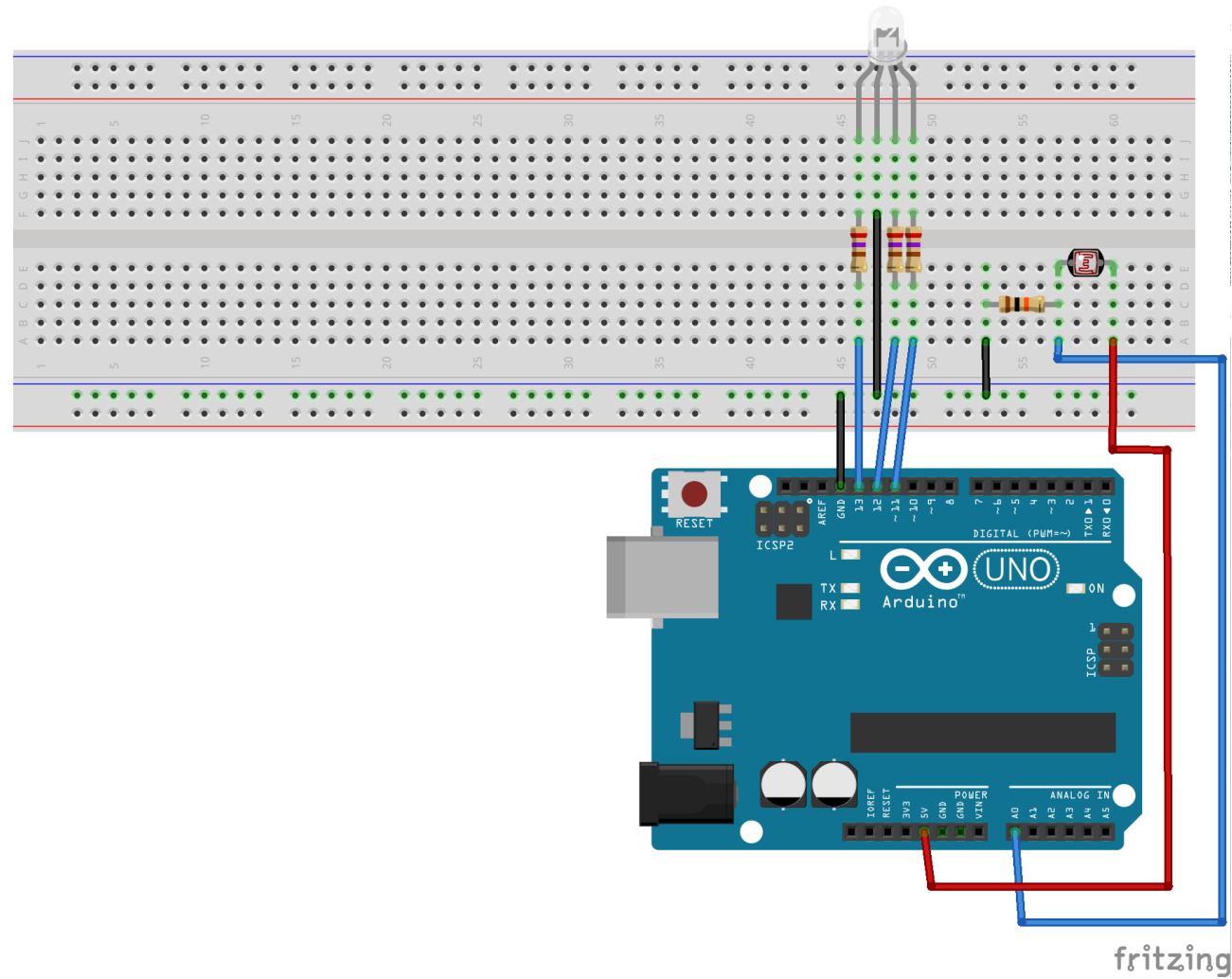
Die Circuit



Die Parts

- 6 - LEDs
- 6 - 270 Ohm Resistor

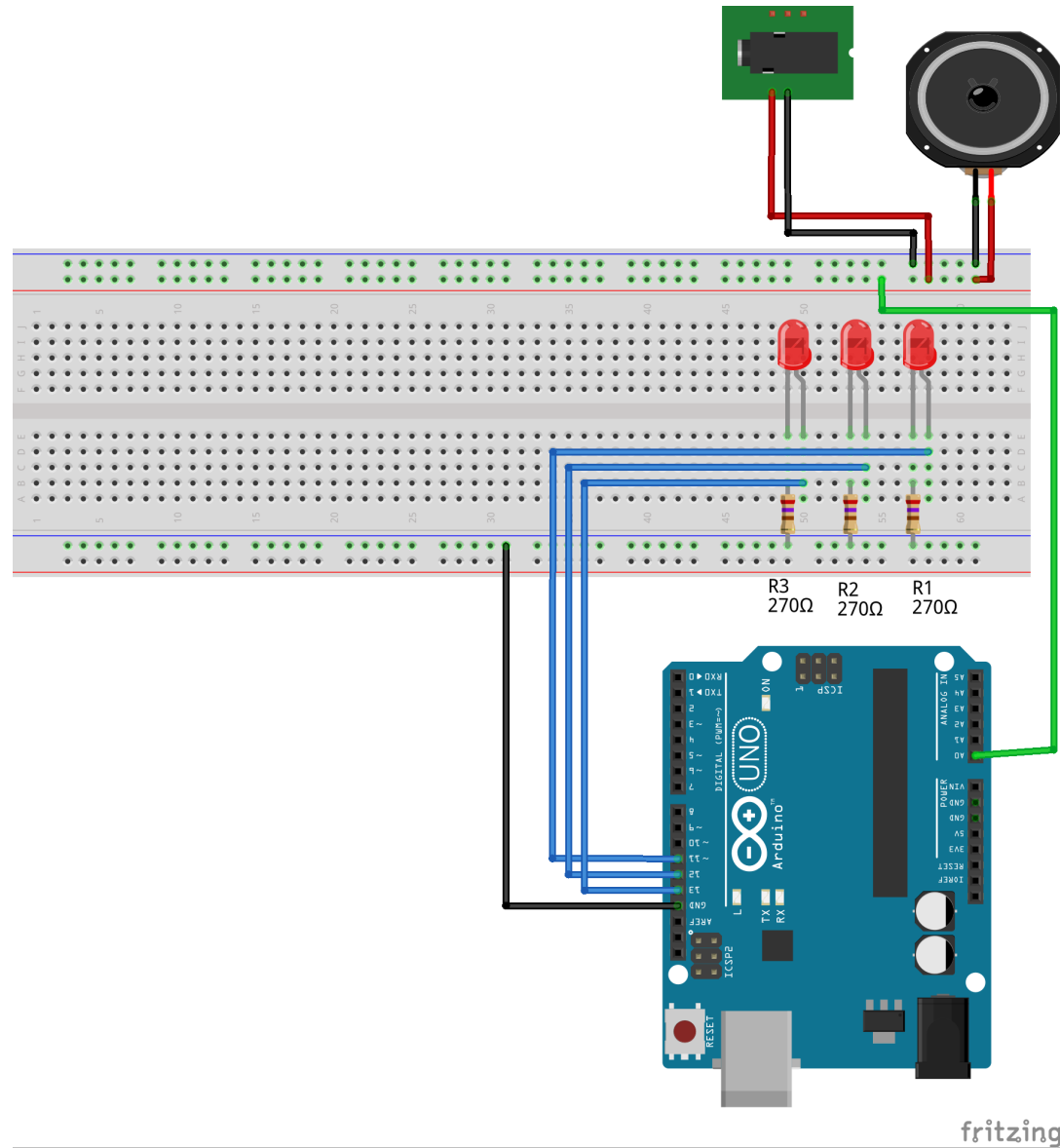
Distance Detection Circuit



Distance Detection Parts

- 3 - 270 Ohm resistor
- 1 – 10K Ohm resistor
- 1 – Photo-resistor

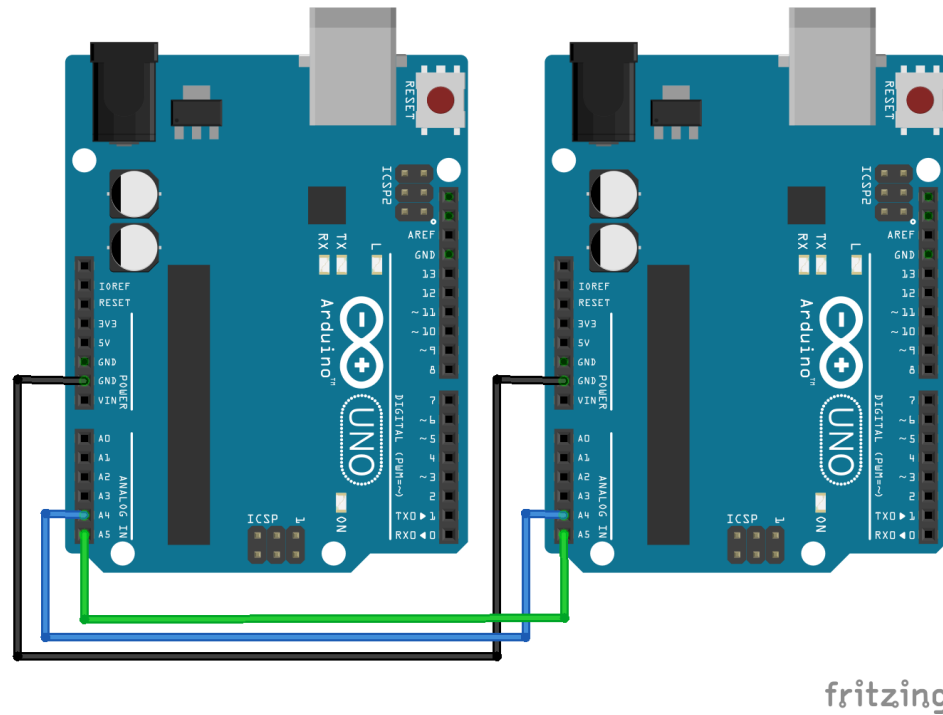
Party Lights Circuit



Party Lights Parts

- 1 – Speaker
- 1 – Audio Jack
- 3 – LEDs
- 3 – 270 Ohm resistors

Chat Circuit



Chat Parts

- 2 - Arduinos