

The background of the image is a collage of various Arduino-related components. It includes several microcontroller chips (ATmega328P, ATmega1609, ATmega328P-PU) in different packages (DIP, QFN, SOIC). There are also two Arduino boards: a green Uno board and a blue Uno board. Additionally, there are several modules, including a USB-to-UART module (FT232RL) and a USB-to-UART module (FT232RL). The text "Arduino Workshop" is prominently displayed in the center, with "By MakerSpace@Yahoo" below it.

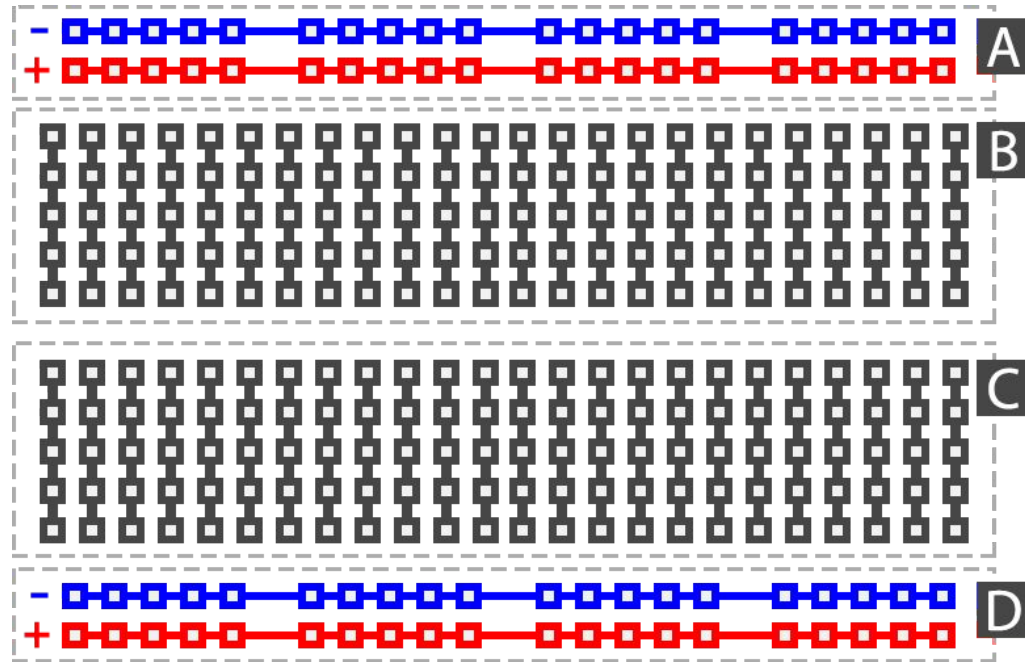
Arduino Workshop

By MakerSpace@Yahoo

<http://bit.ly/makerspace-arduino-101>



Breadboard Basics

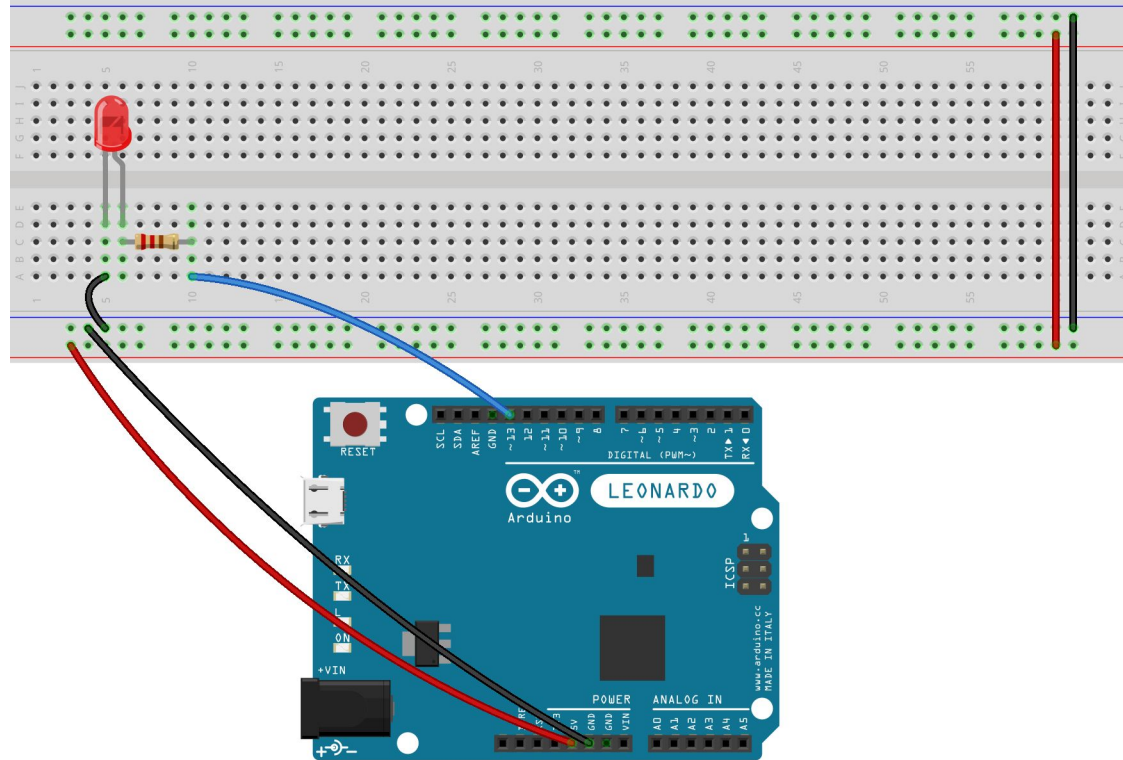


Make the LED blink

<http://bit.ly/makerspace-arduino-blink>



Wire the LED



Control the brightness of the LED

<http://bit.ly/makerspace-arduino-pulse>



Pulse Width Modulation

50% duty cycle



75% duty cycle



25% duty cycle

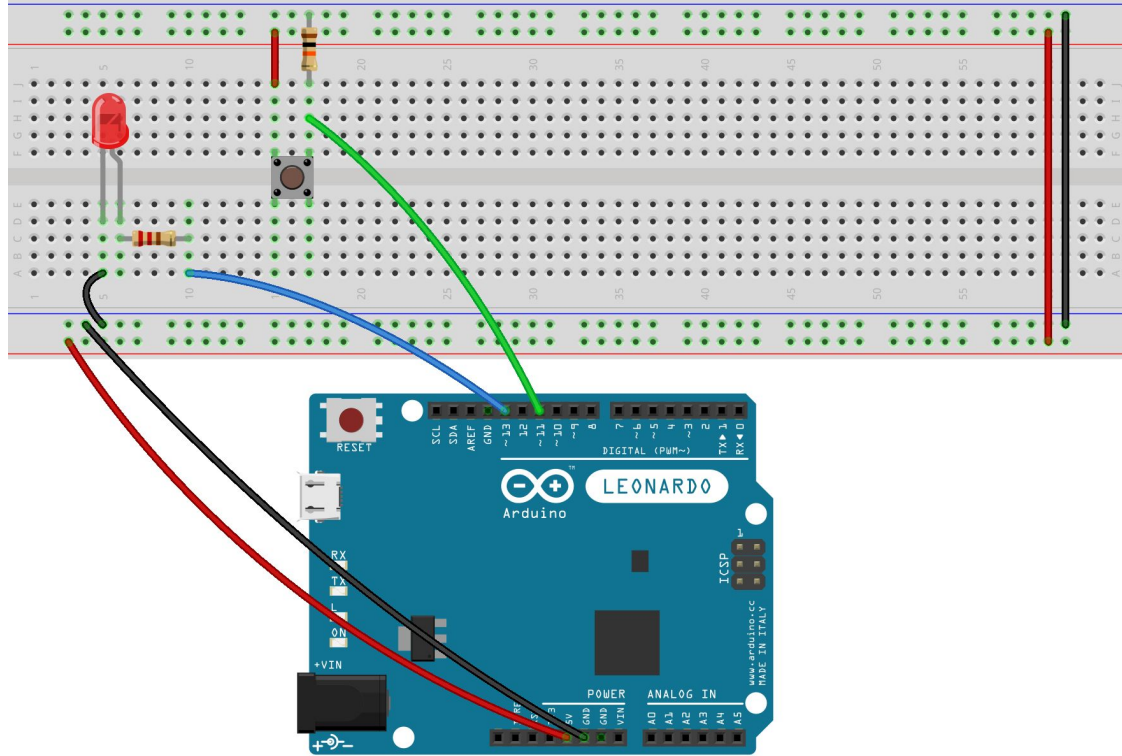


Press button to turn on LED

<http://bit.ly/makerspace-arduino-button>



Wire push button

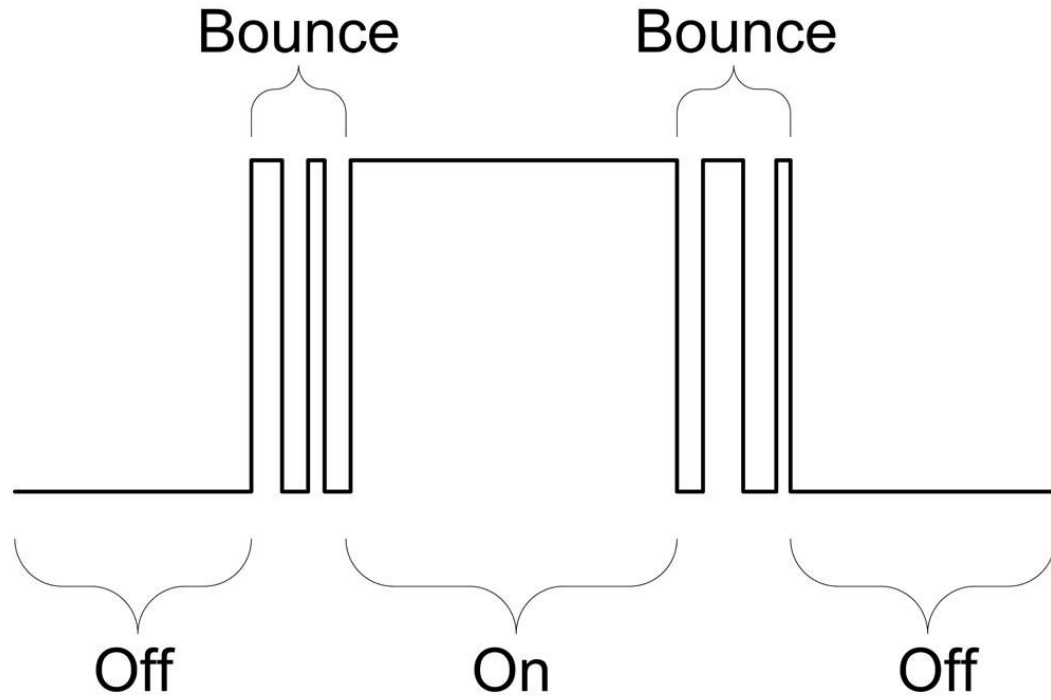


Press button to toggle LED state

<http://bit.ly/makerspace-arduino-debounce>



Debouncing

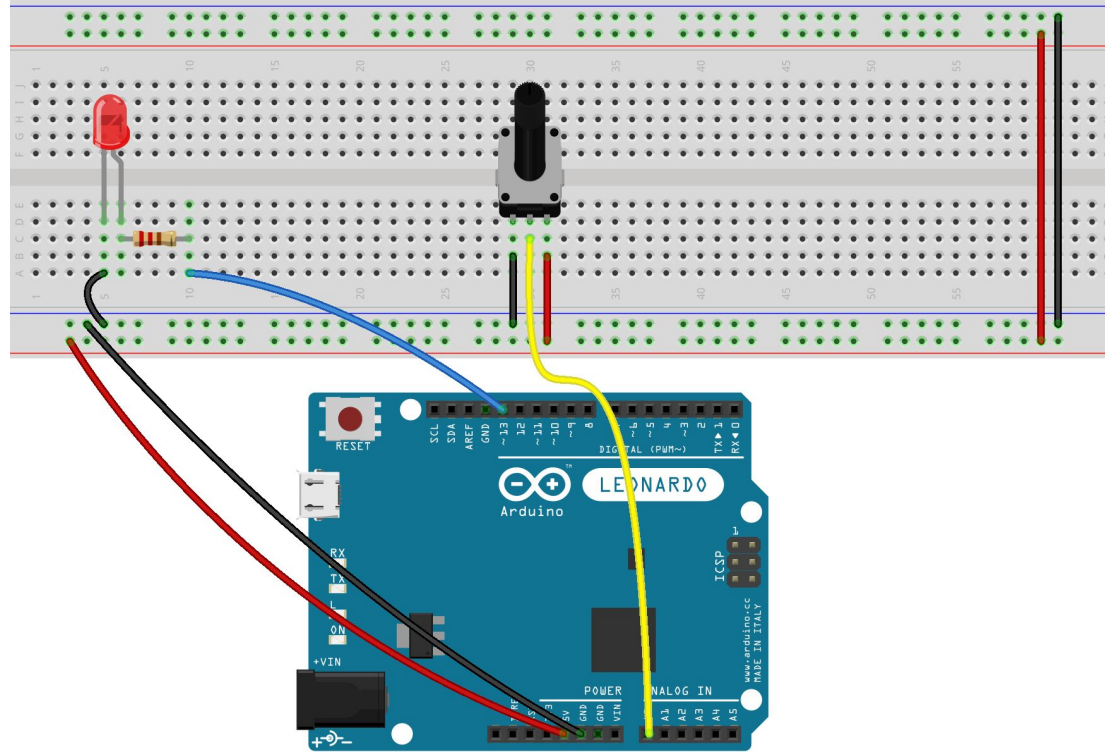


Control the brightness of the LED with pot

<http://bit.ly/makerspace-arduino-pot>

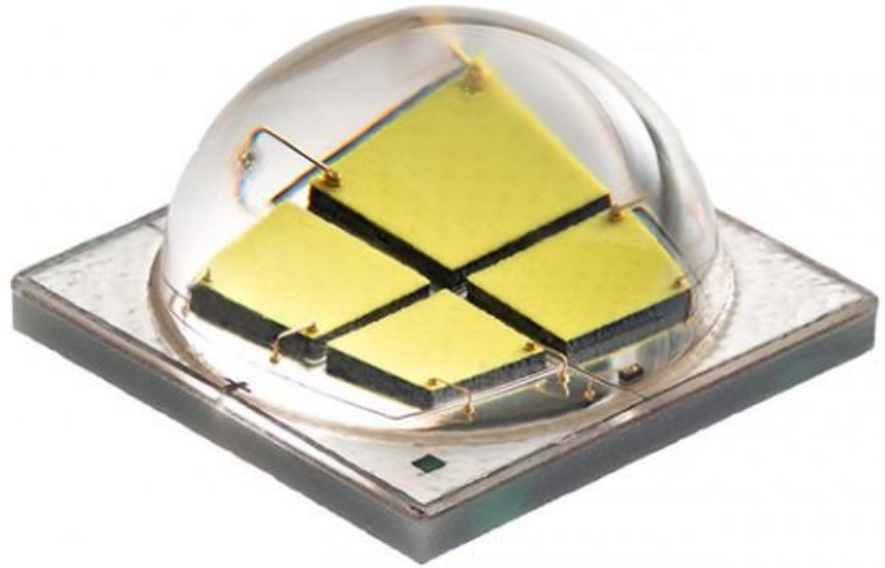


Wire the potentiometer

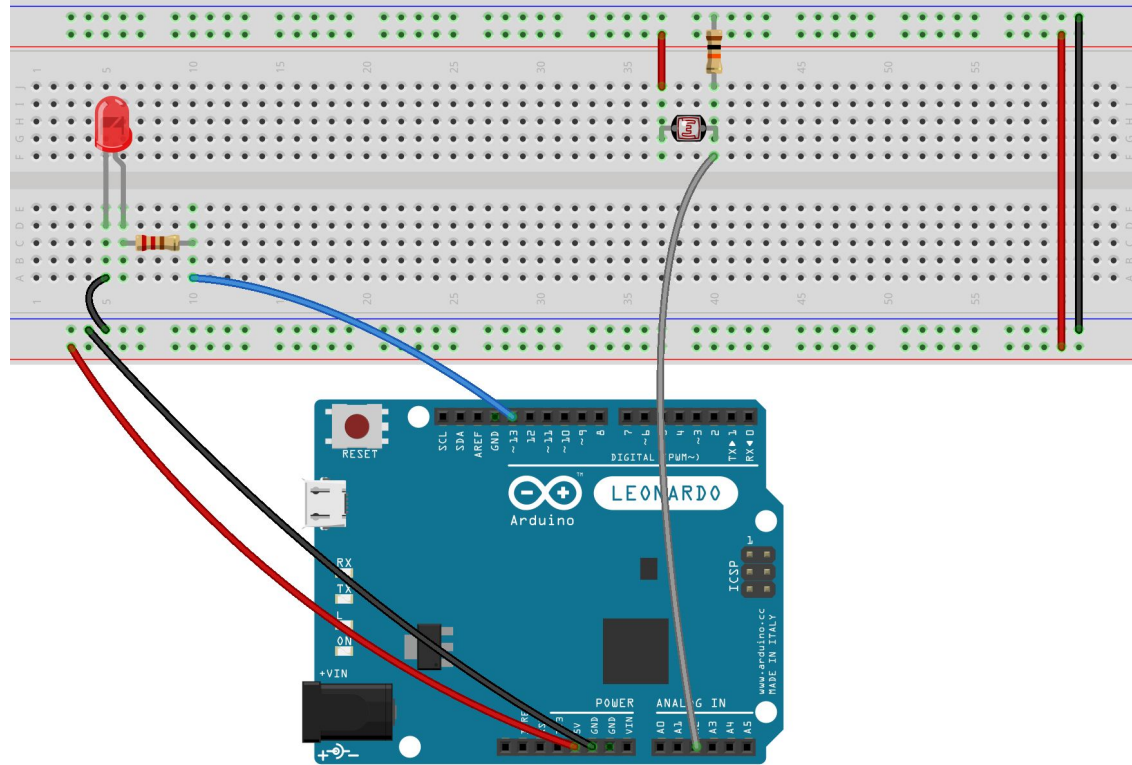


Control the brightness of the LED with light

<http://bit.ly/makerspace-arduino-ldr>



Wire the light dependent resistor

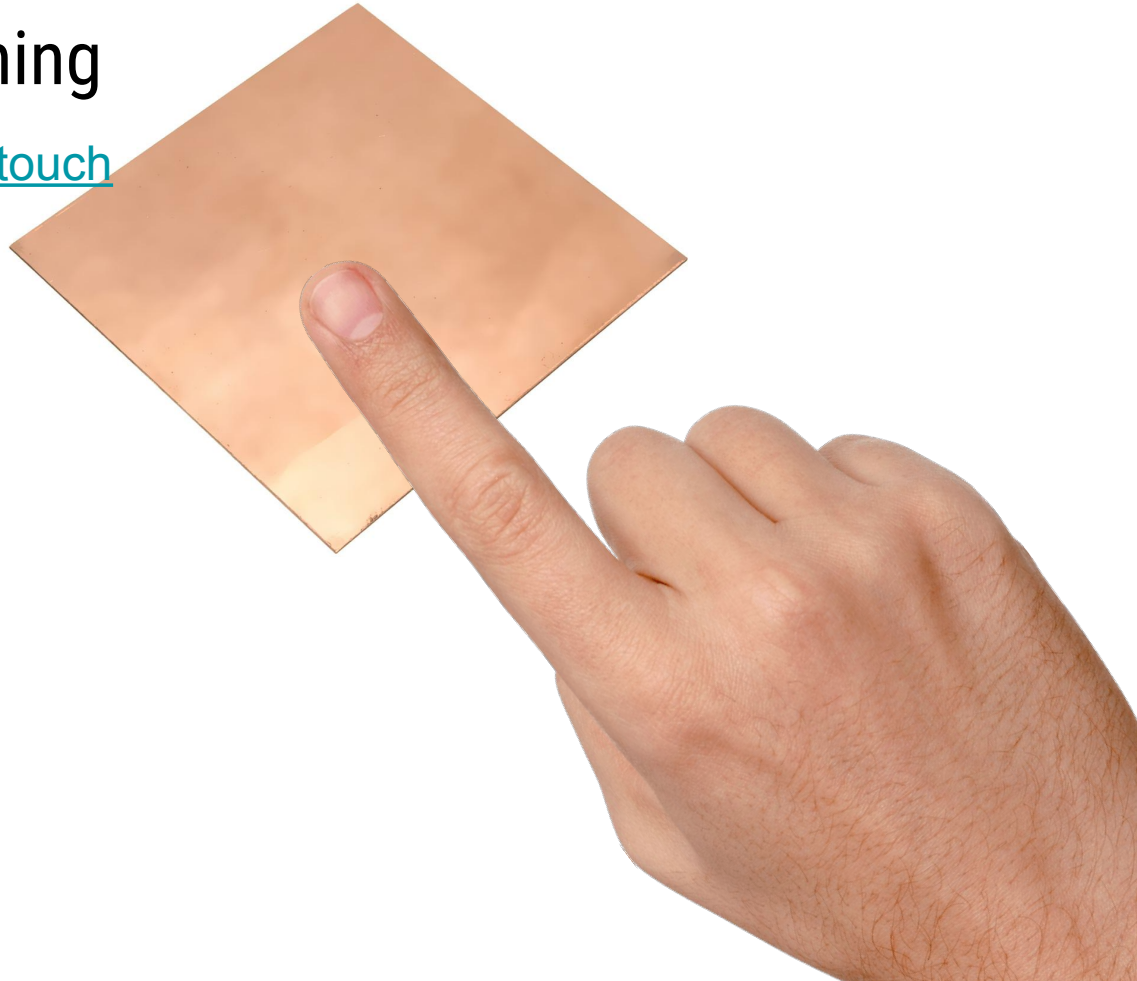


Download Capacitive Sense Library

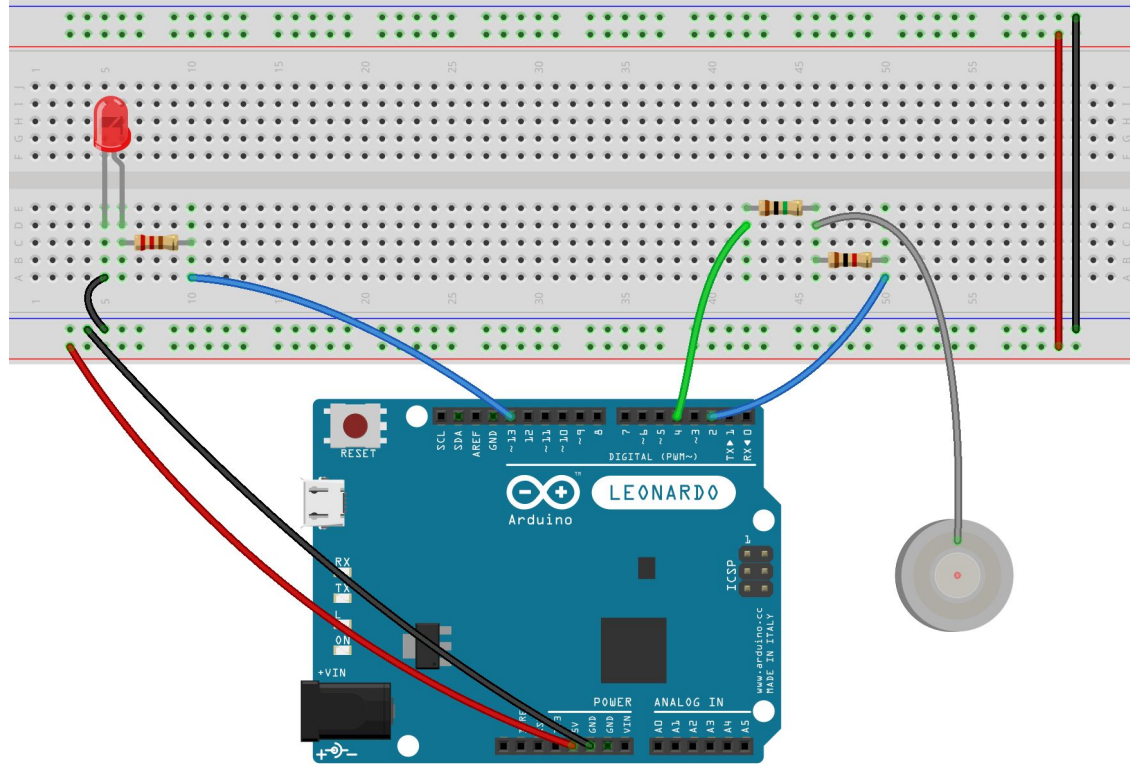
1. Close Arduino IDE
2. Open Terminal
3. Execute these commands
 - `cd ~/Documents/Arduino/libraries`
 - `git clone https://github.com/arduino-libraries/CapacitiveSensor.git`
4. Re-open Arduino IDE

Toggle the LED by touching

<http://bit.ly/makerspace-arduino-touch>



Wire the touch sensor



Q & A