

A collage of various Arduino components including microcontrollers, boards, and modules. The components are arranged around the central text. At the top left is a green PCB with a USB connector and a microcontroller. To its right is a small black 8-pin DIP chip. Further right is a square black microcontroller with pins. At the top right is a blue USB-to-TTL module with a yellow USB connector. Below the top left is a long black DIP chip. In the bottom left is a large black DIP chip. In the bottom center is a square black microcontroller. In the bottom right is an Arduino Uno board. To its right is a small black 8-pin DIP chip. Further right is a long black DIP chip. At the bottom right is another small black 8-pin DIP chip.

# Arduino Workshop

Ven & Jer

<http://yo/arduino-101>

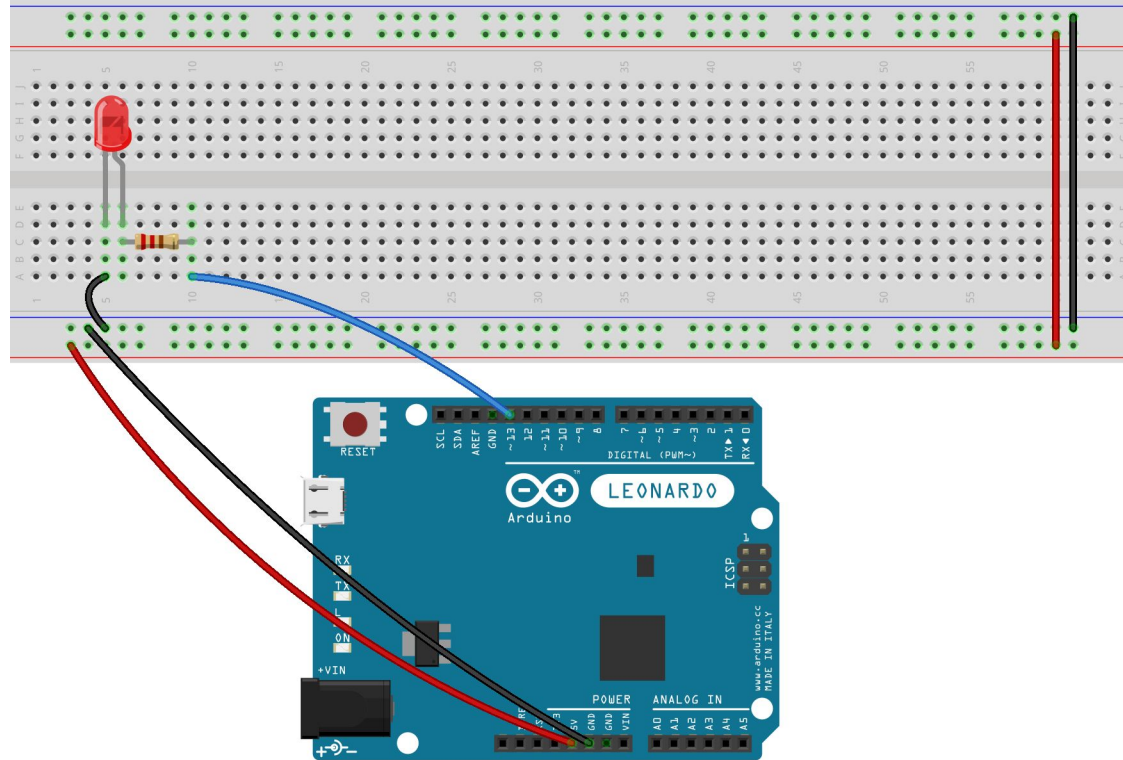


# Make the LED blink

<http://yo/arduino-1>



# Wire the LED



# Control the brightness of the LED

<http://yo/arduino-2>



# Pulse Width Modulation

**50% duty cycle**



**75% duty cycle**



**25% duty cycle**

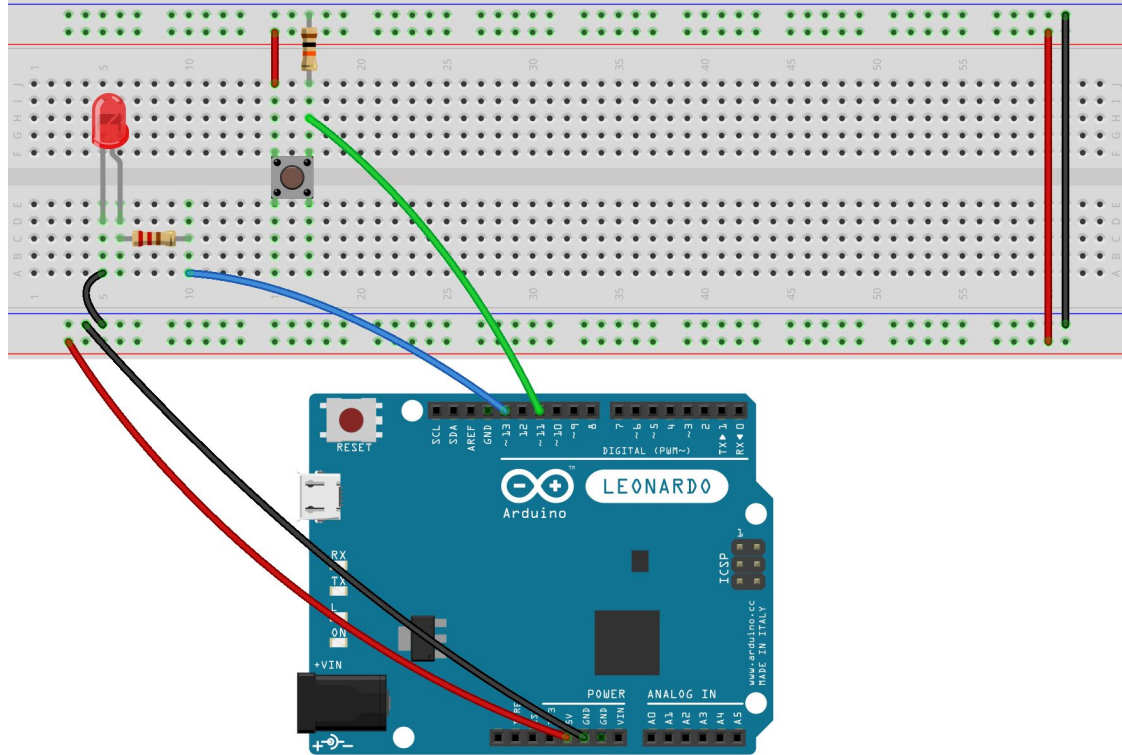


# Press button to turn on LED

<http://yo/arduino-3>



# Wire push button



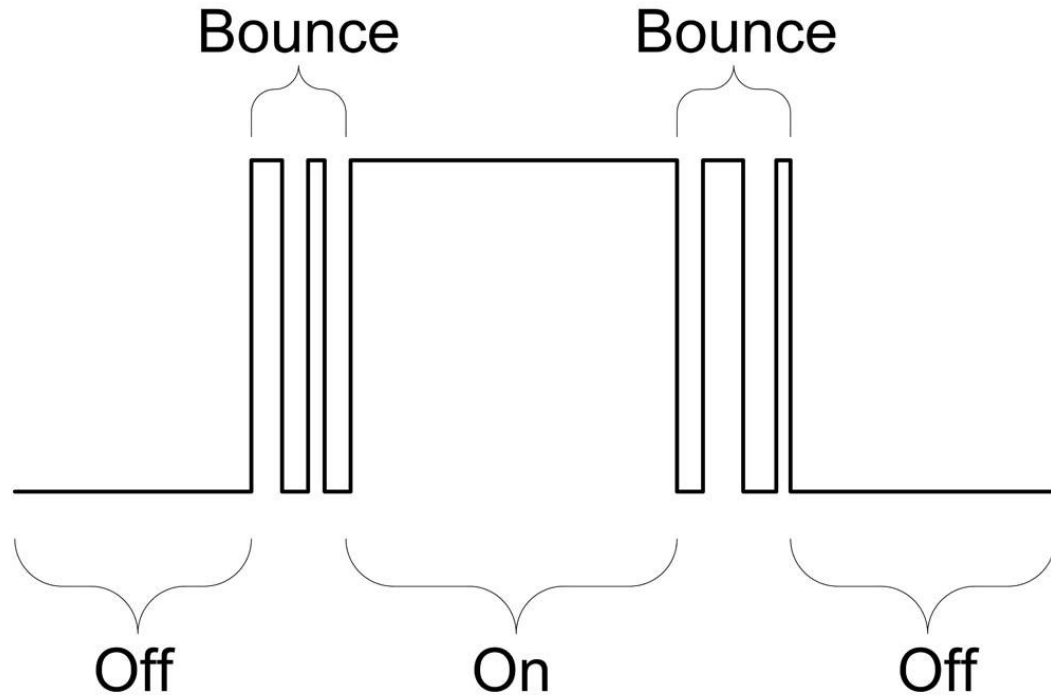


# Press button to toggle LED state

<http://yo/arduino-4>



# Debouncing

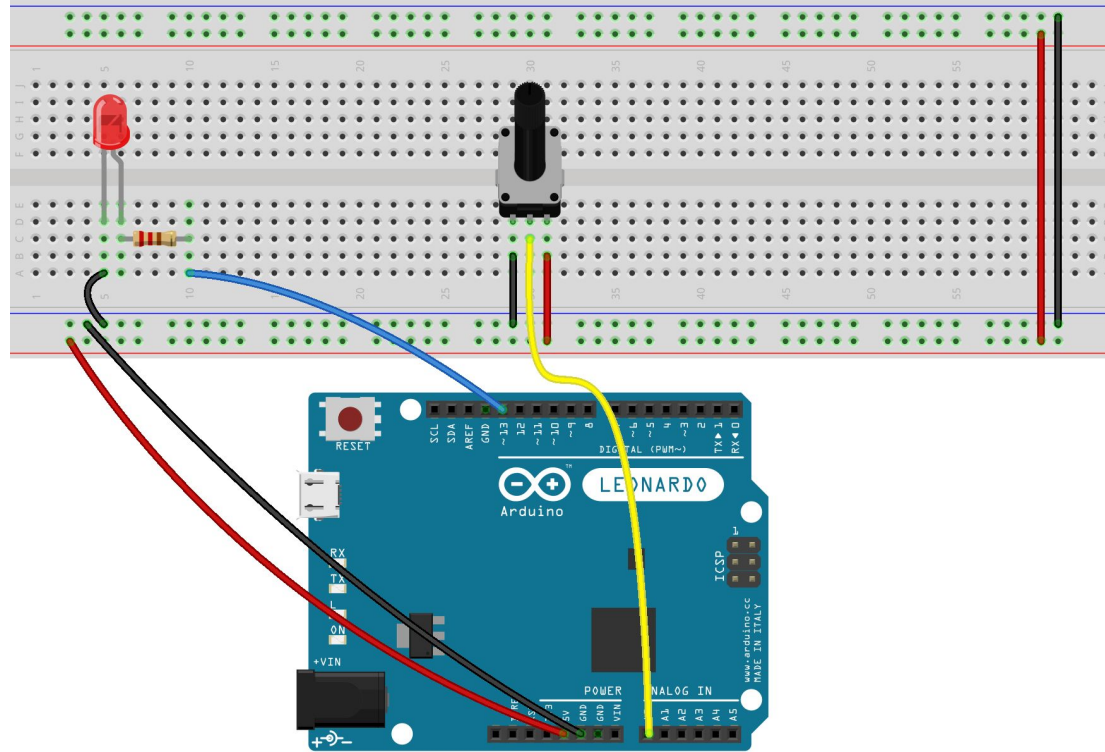


# Control the brightness of the LED with pot

<http://yo/arduino-5>

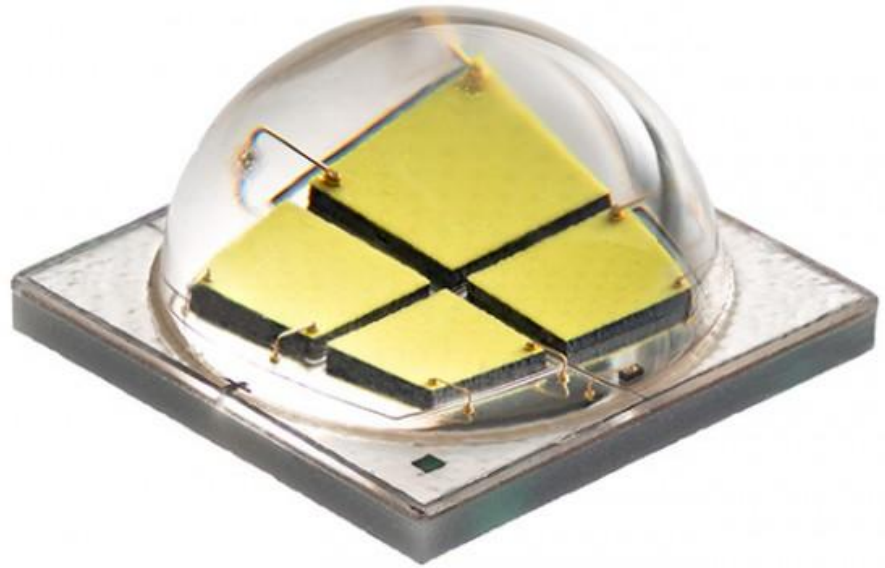


# Wire the potentiometer

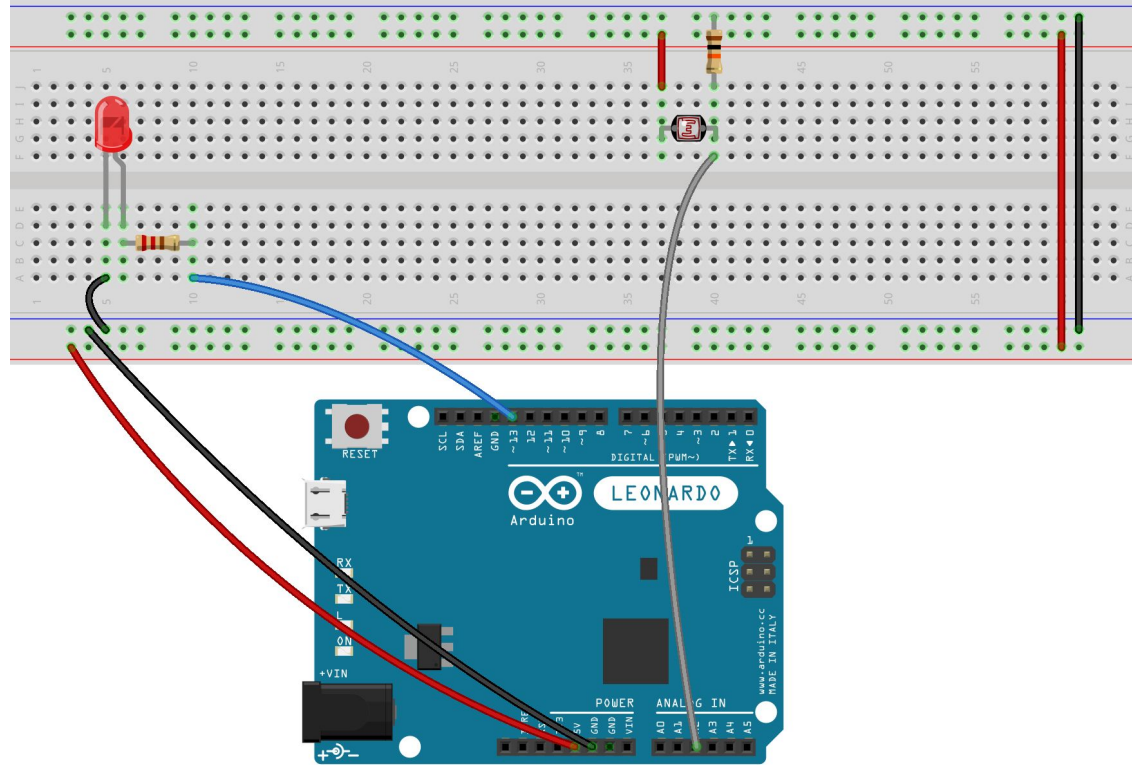


# Control the brightness of the LED with light

<http://yo/arduino-6>



# Wire the light dependent resistor



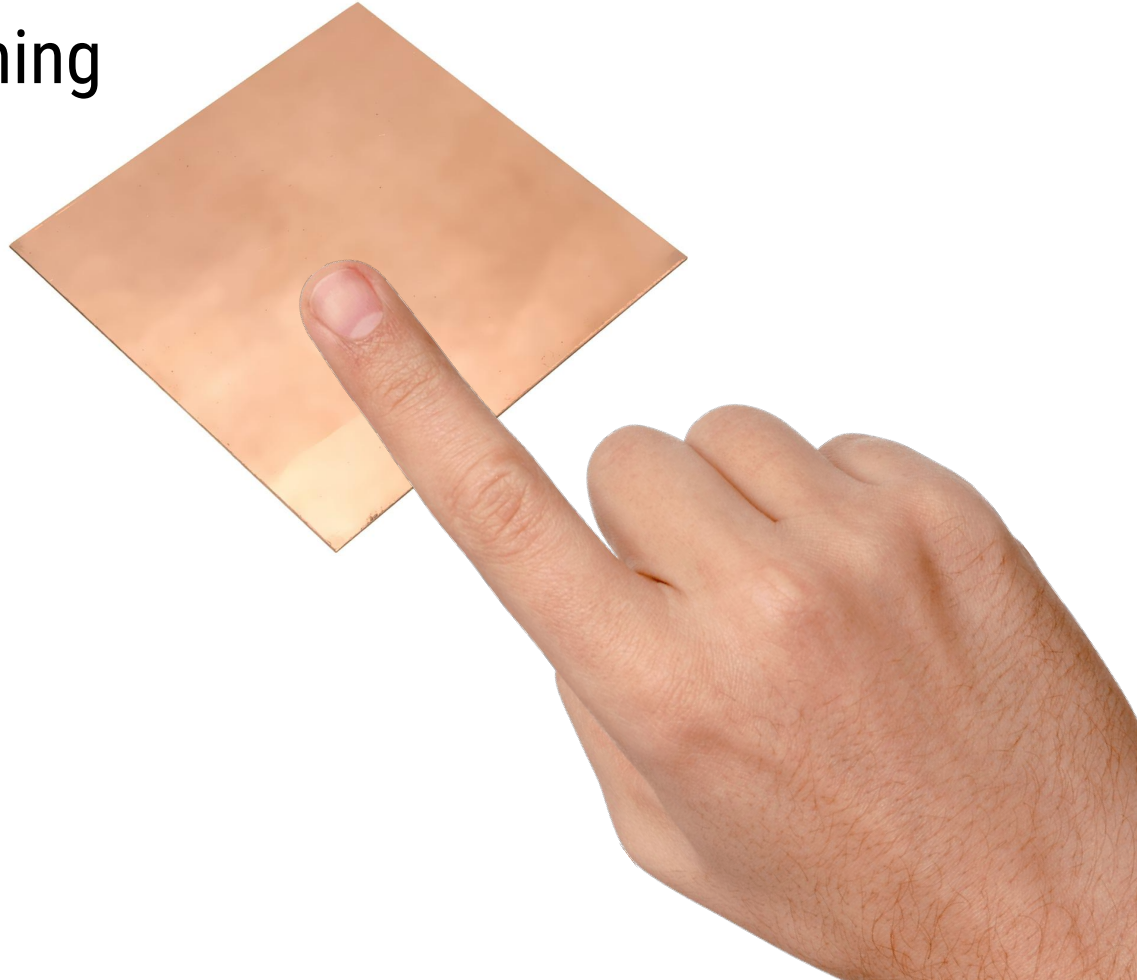
# Download Capacitive Sense Library

```
$ cd ~/Documents/Arduino/libraries
```

```
$ git clone git@github.com:arduino-libraries/CapacitiveSensor.git
```

# Toggle the LED by touching

<http://yo/arduino-7>





# Wire the touch sensor

