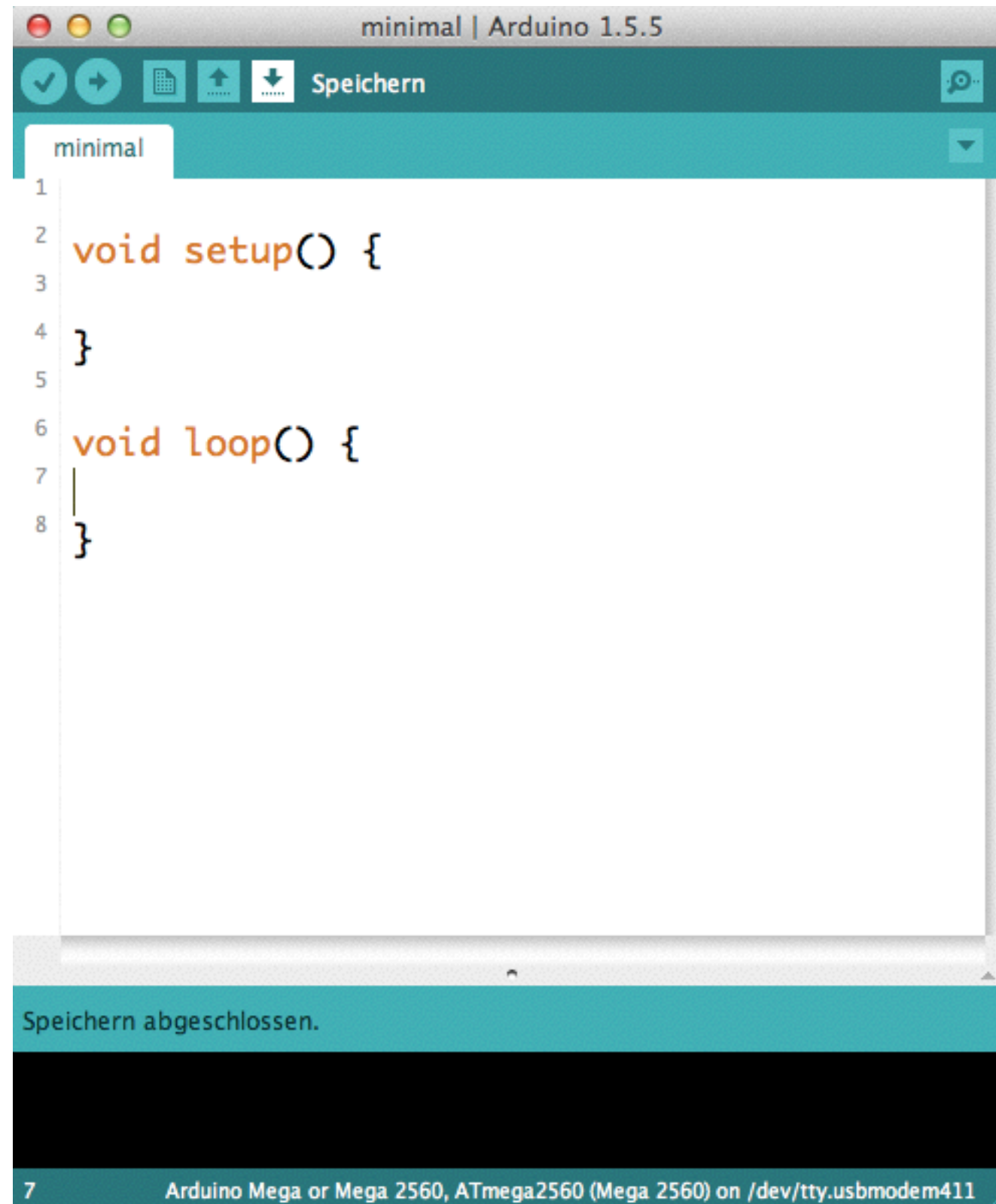


# DramaLab

## First Program

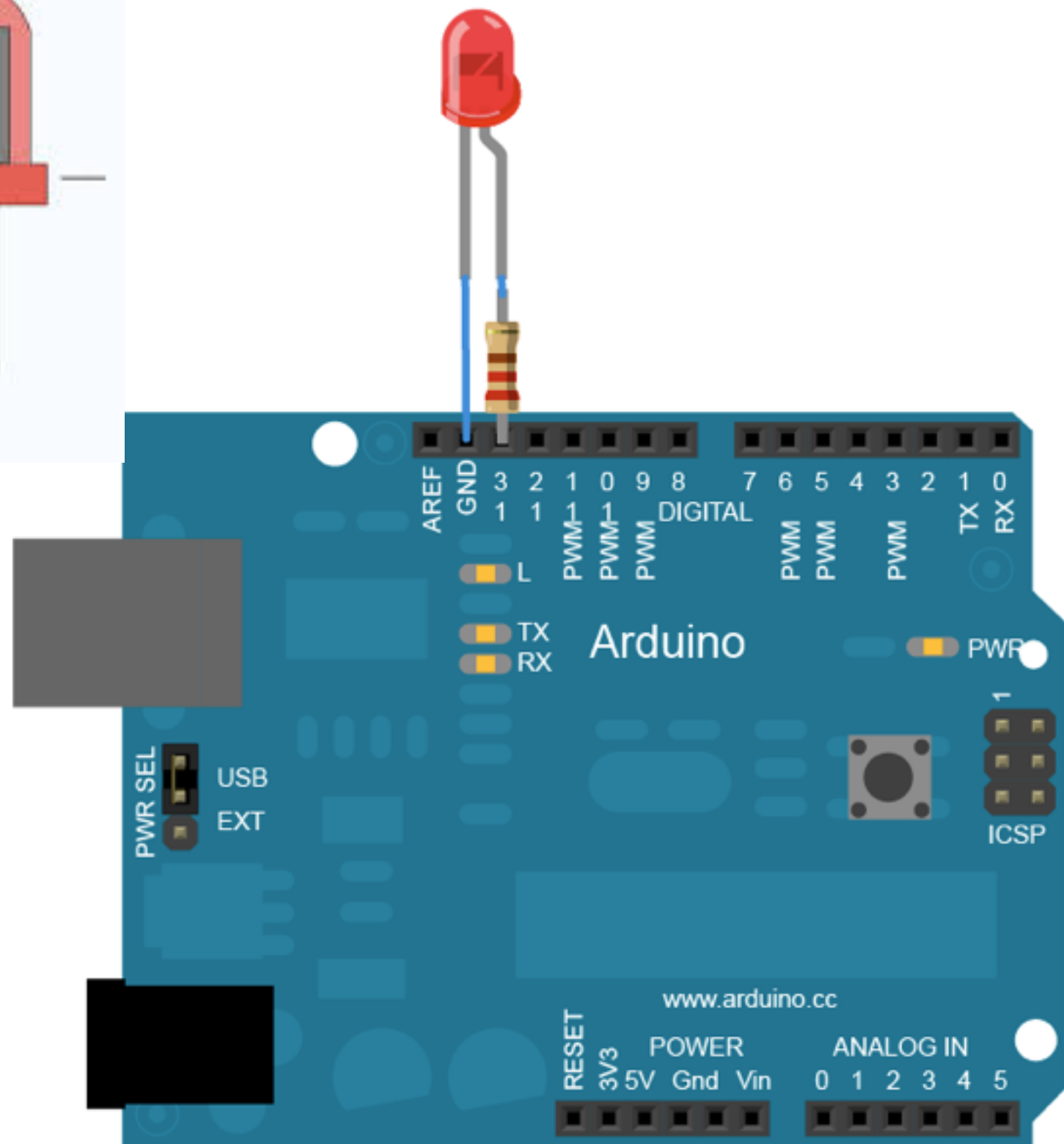
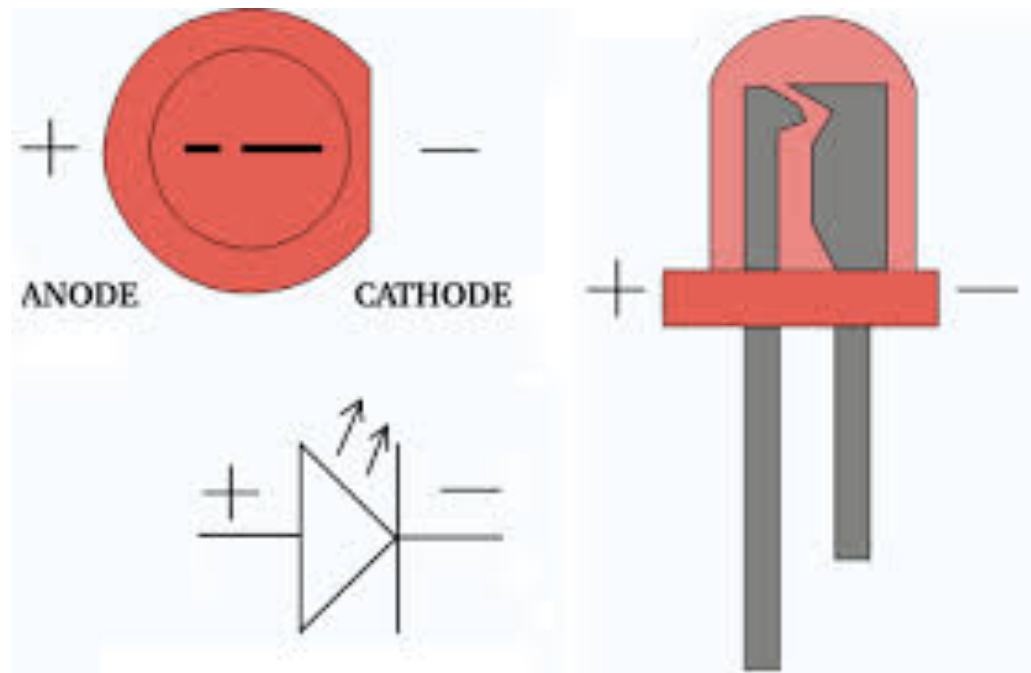


The screenshot shows the Arduino IDE window titled "minimal | Arduino 1.5.5". The top toolbar includes icons for a checkmark, a right arrow, a document, an upload arrow, a download arrow, and a "Speichern" (Save) button. Below the toolbar is a tab labeled "minimal". The main text area contains the following code:

```
1  
2 void setup() {  
3  
4 }  
5  
6 void loop() {  
7 |  
8 }
```

At the bottom, a status bar displays "Speichern abgeschlossen." (Save completed.) and "7 Arduino Mega or Mega 2560, ATmega2560 (Mega 2560) on /dev/tty.usbmodem411".

**„Hello World“**



# Useful Functions

`pinMode(pin, mode)`

Configures the specified pin to behave either as an input or an output

`digitalRead()`

Reads the value from a specified digital pin, either HIGH or LOW.

`digitalWrite(pin, value)`

Write a HIGH or a LOW value to a digital pin.

`analogRead()`

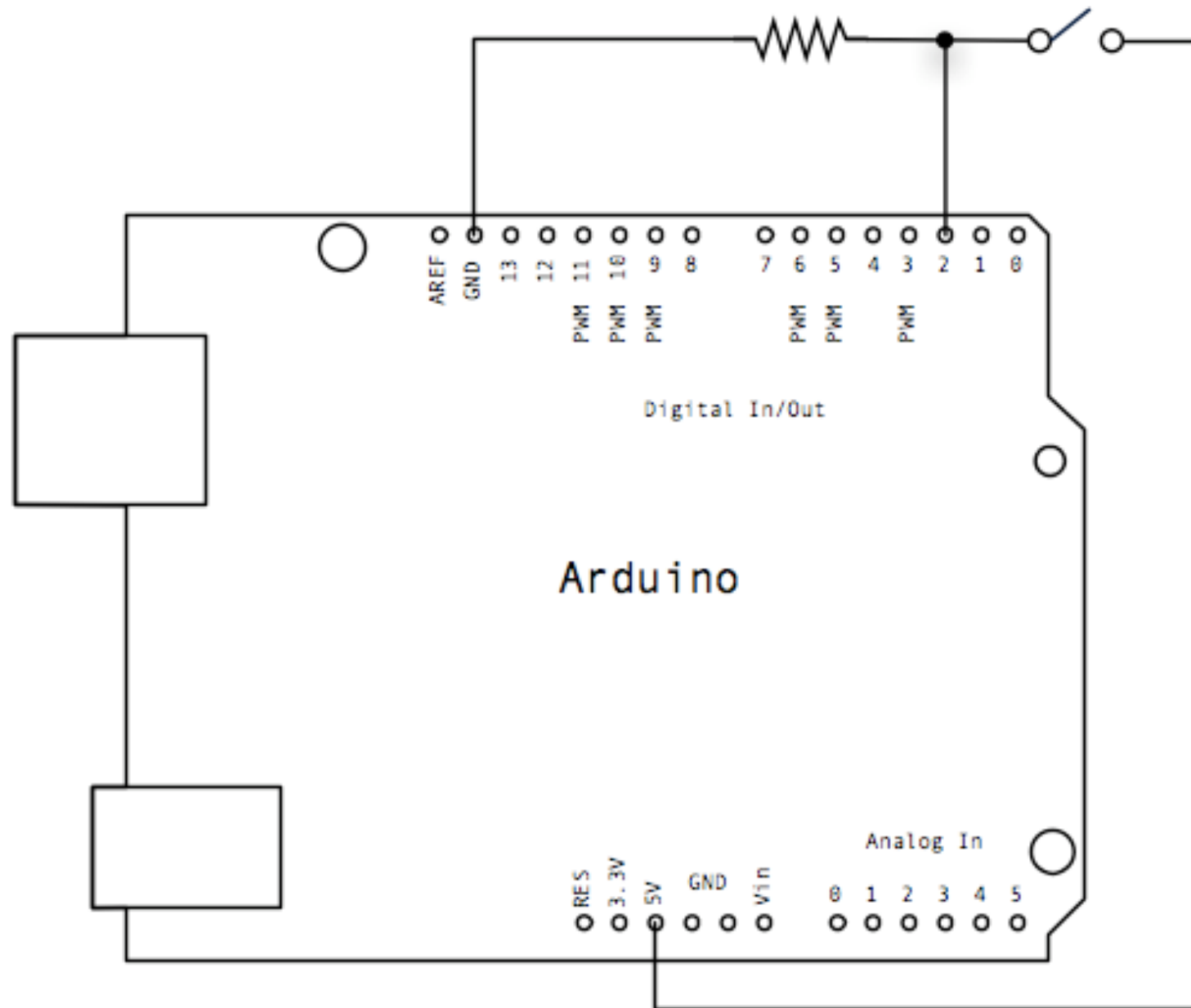
Reads the value from the specified analog pin

`analogWrite(pin, value)`

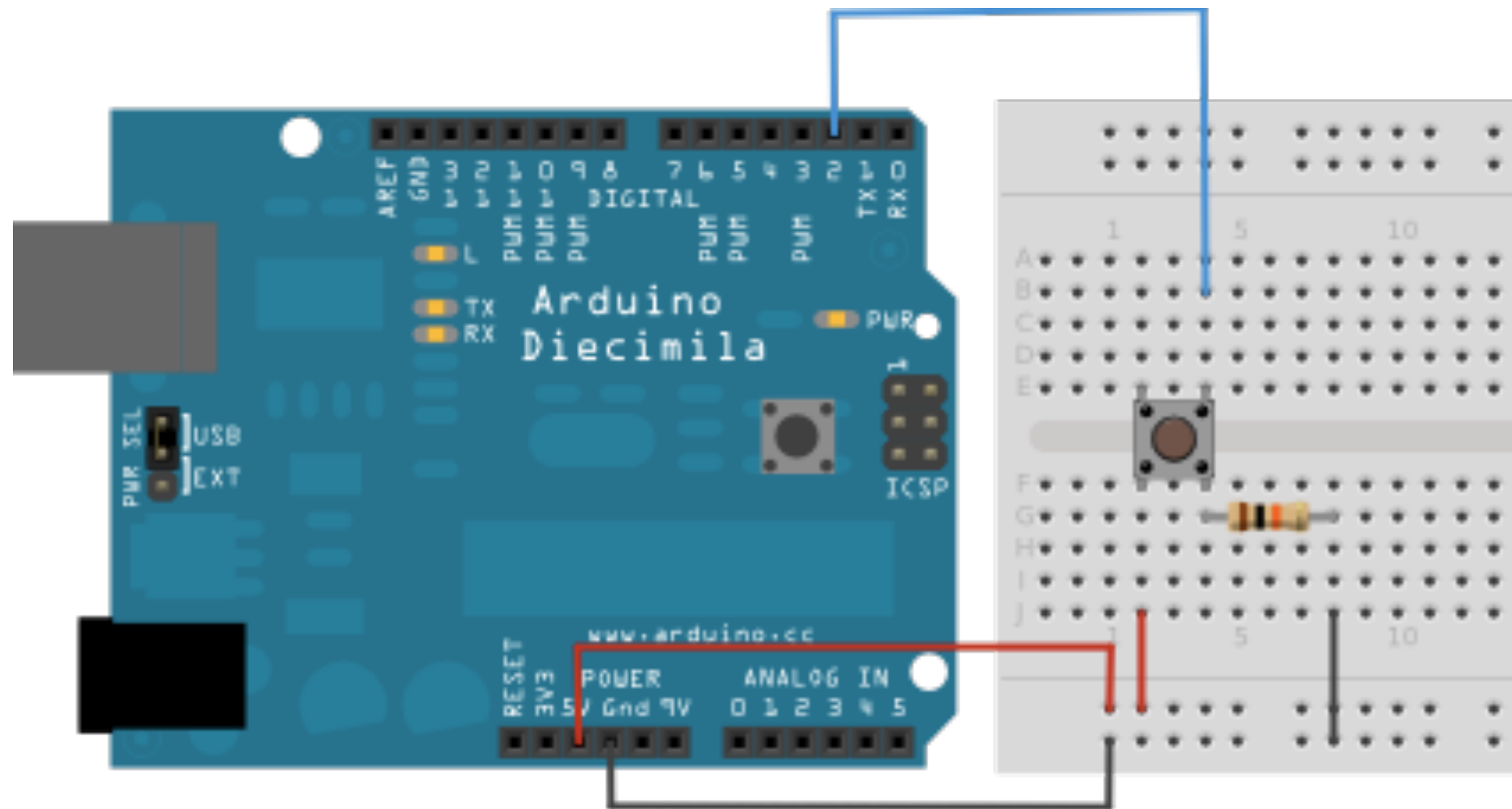
Writes an analog value (PWM wave) to a pin

```
1  
2 int led = 13;  
3  
4 void setup() {  
5     pinMode(led, OUTPUT);  
6 }  
7  
8 void loop() {  
9     digitalWrite(led, HIGH);  
10    delay(1000);  
11    digitalWrite(led, LOW);  
12    delay(1000);  
13 }
```

# Using a button



# Using a button





# Reading the button state

```
1 int buttonPin = 2;
2 int ledPin = 13;
3
4 int buttonState = 0;
5 void setup() {
6   pinMode(ledPin, OUTPUT);
7   pinMode(buttonPin, INPUT);
8 }
9
10 void loop(){
11   buttonState = digitalRead(buttonPin);
12
13   if (buttonState == HIGH) {
14     digitalWrite(ledPin, HIGH);
15   } else {
16     digitalWrite(ledPin, LOW);
17   }
18 }
```