ENGINEERING

OCTAVIO ORTIZ

ENGINEERING & COMPUTER SCIENCE

FEBRUARY 2ND, 2025

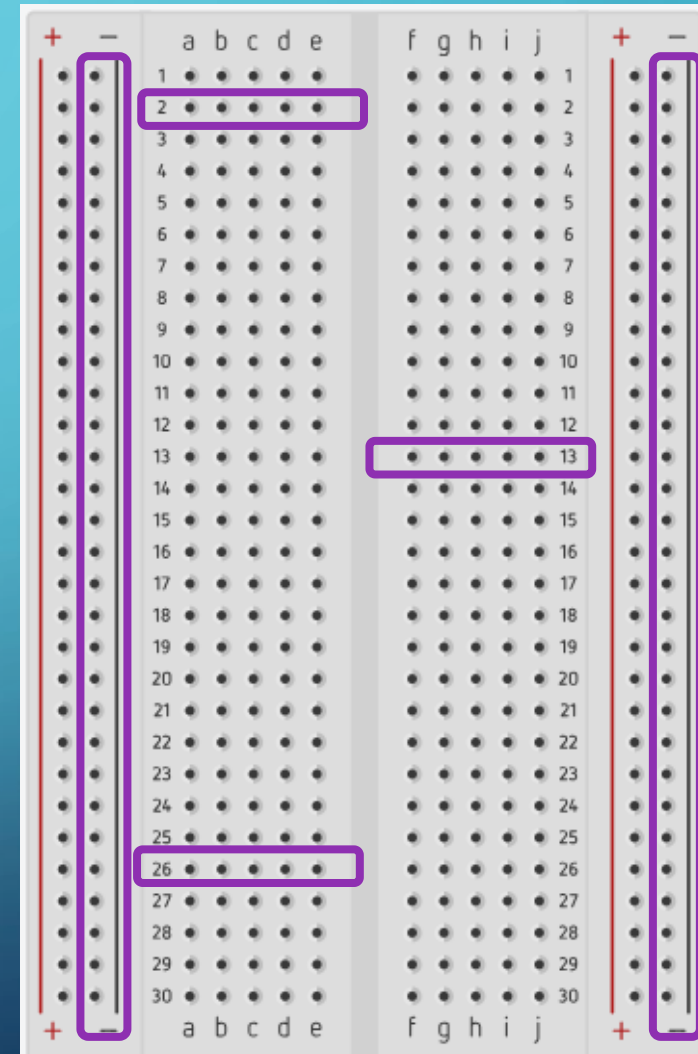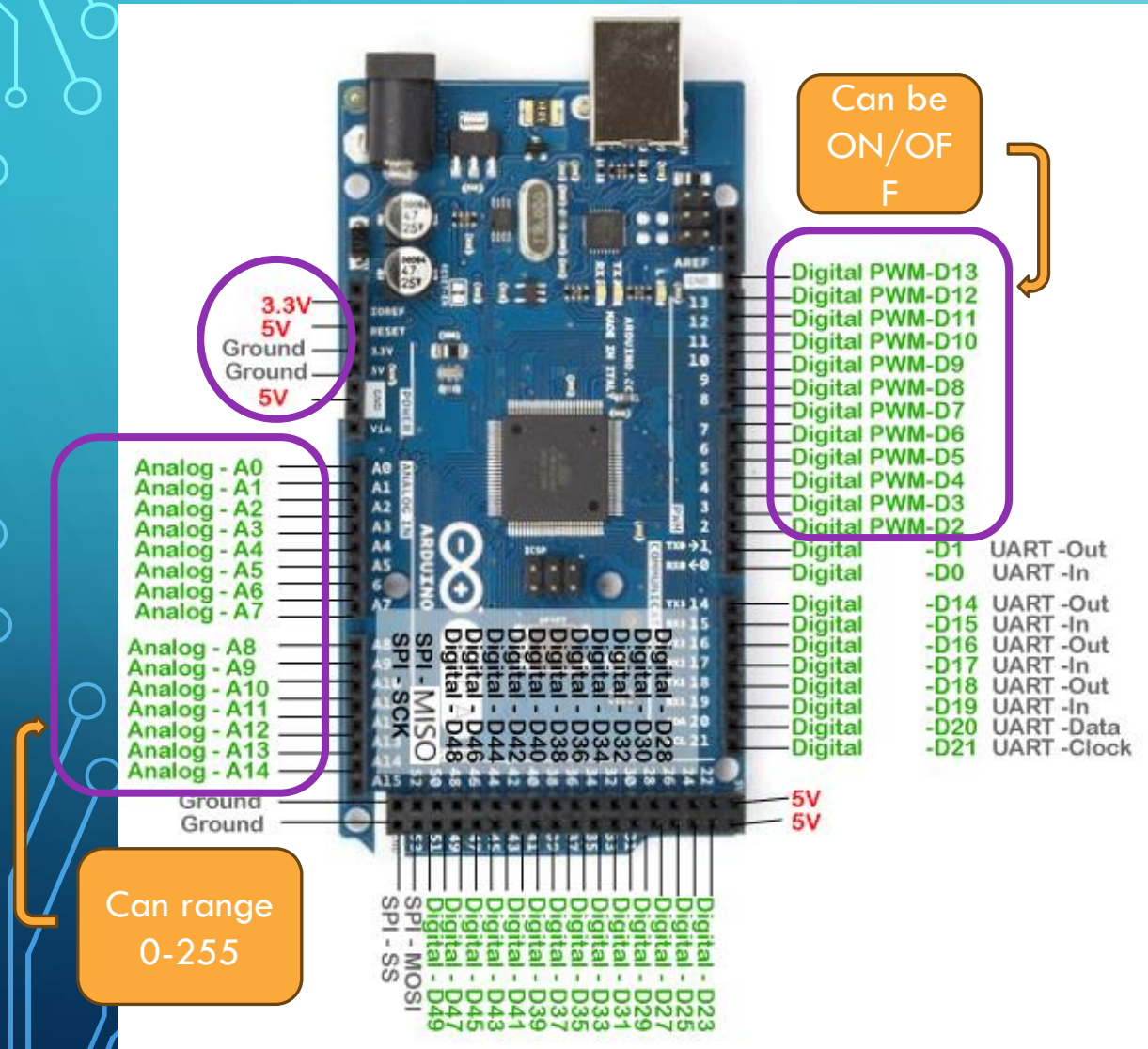# PRE-ENGINEERING A.S. - IVC

- For students seeking degree in:
  - Aerospace Engineering
  - Civil Engineering
  - Computer Engineering
  - Electrical Engineering
  - Mechanical Engineering
  - Structural Engineering
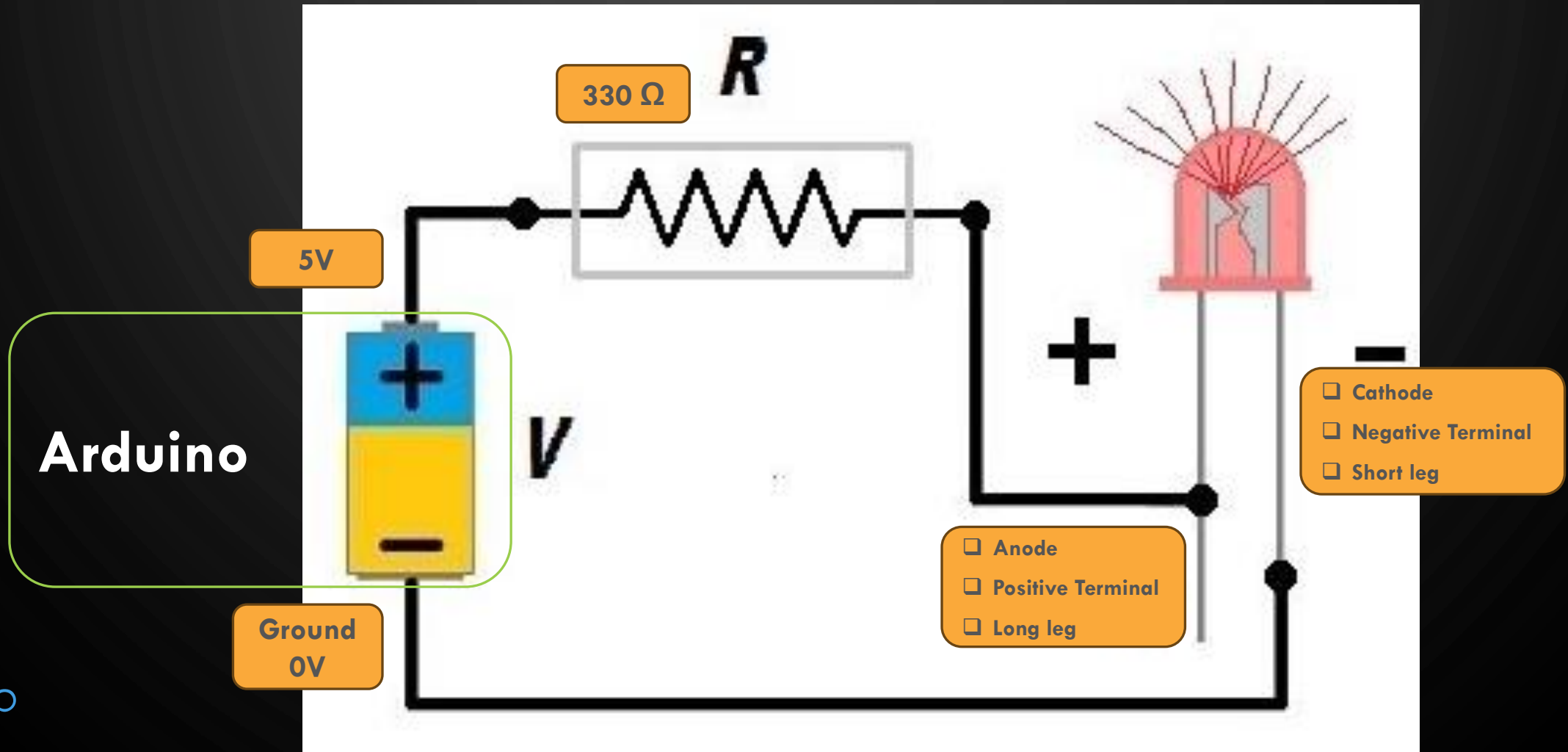
ELECTRICAL CIRCUITS & PROGRAMMING

ARDUINO MEGA 2560

Breadboard

RESISTORS

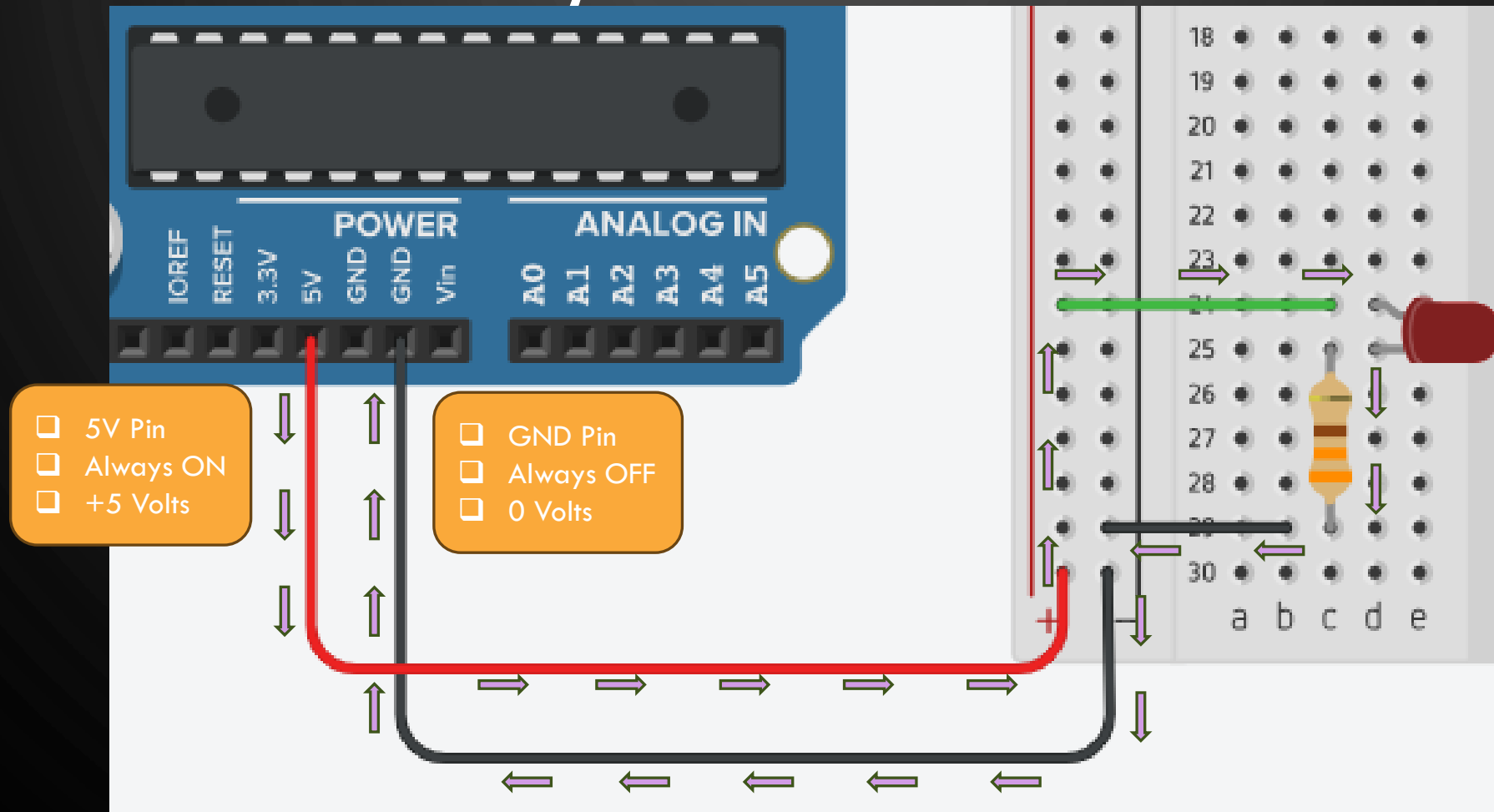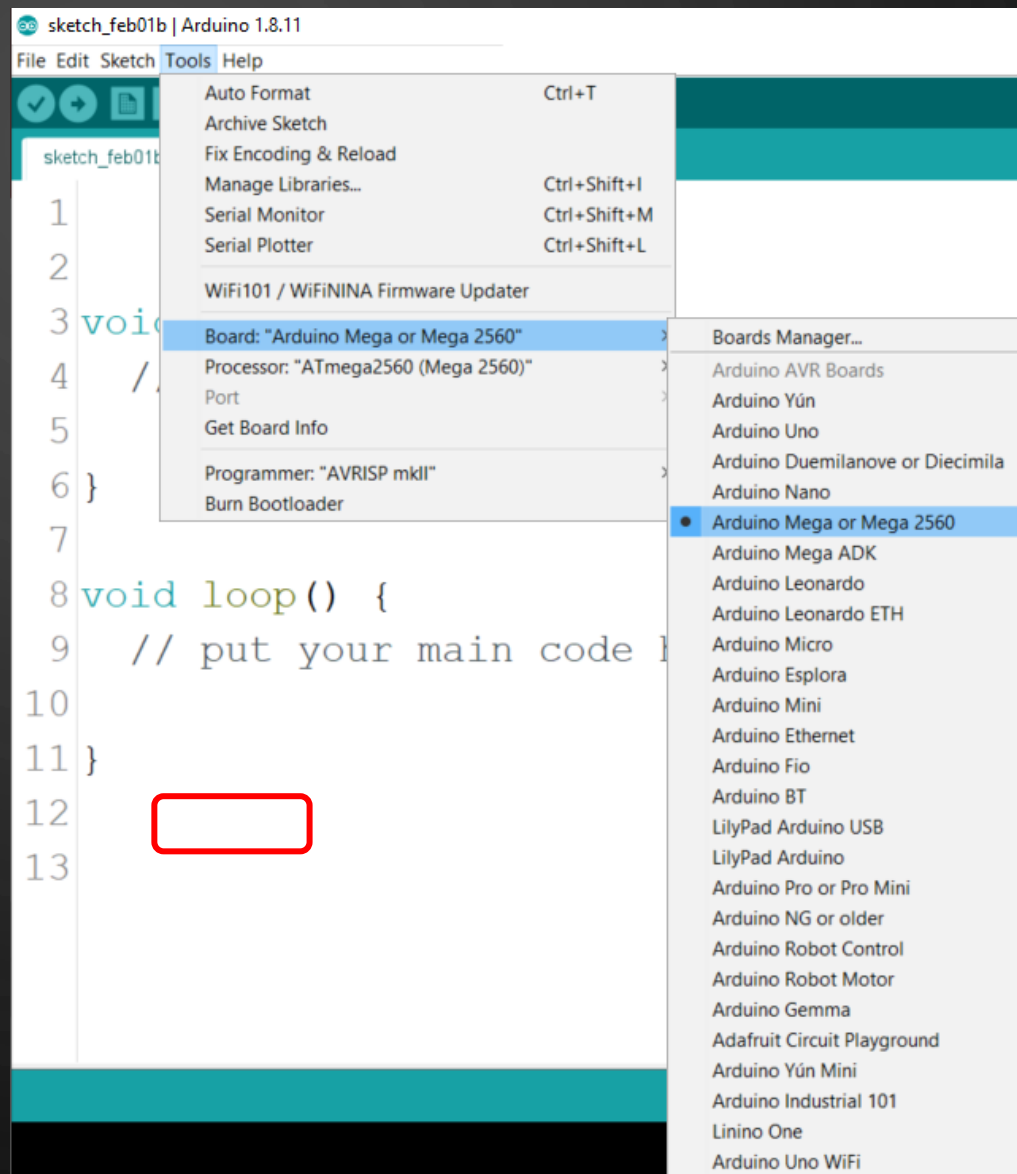# Breadboard

ELECTRIC CIRCUIT

LED ON – CONSTANT POWER (NO CODING)

- 5V Pin
- Always ON
- +5 Volts

- GND Pin
- Always OFF
- 0 Volts
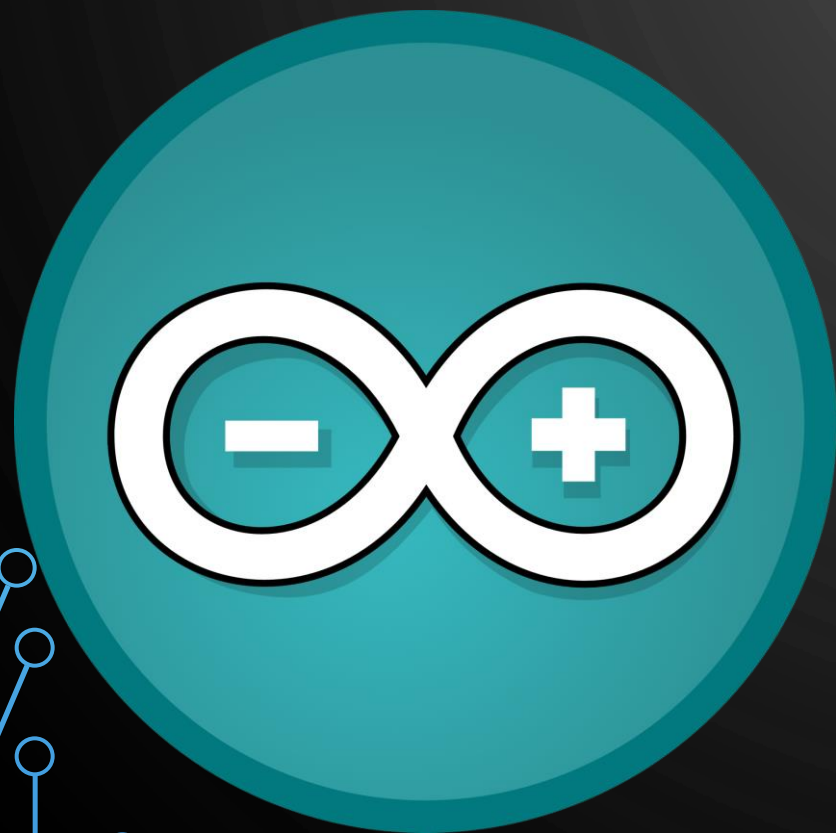
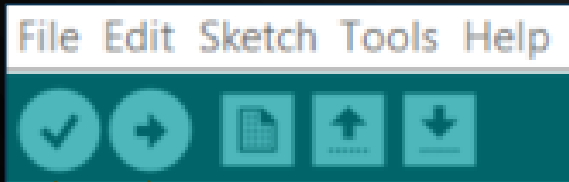# LED ON/OFF – CIRCUIT
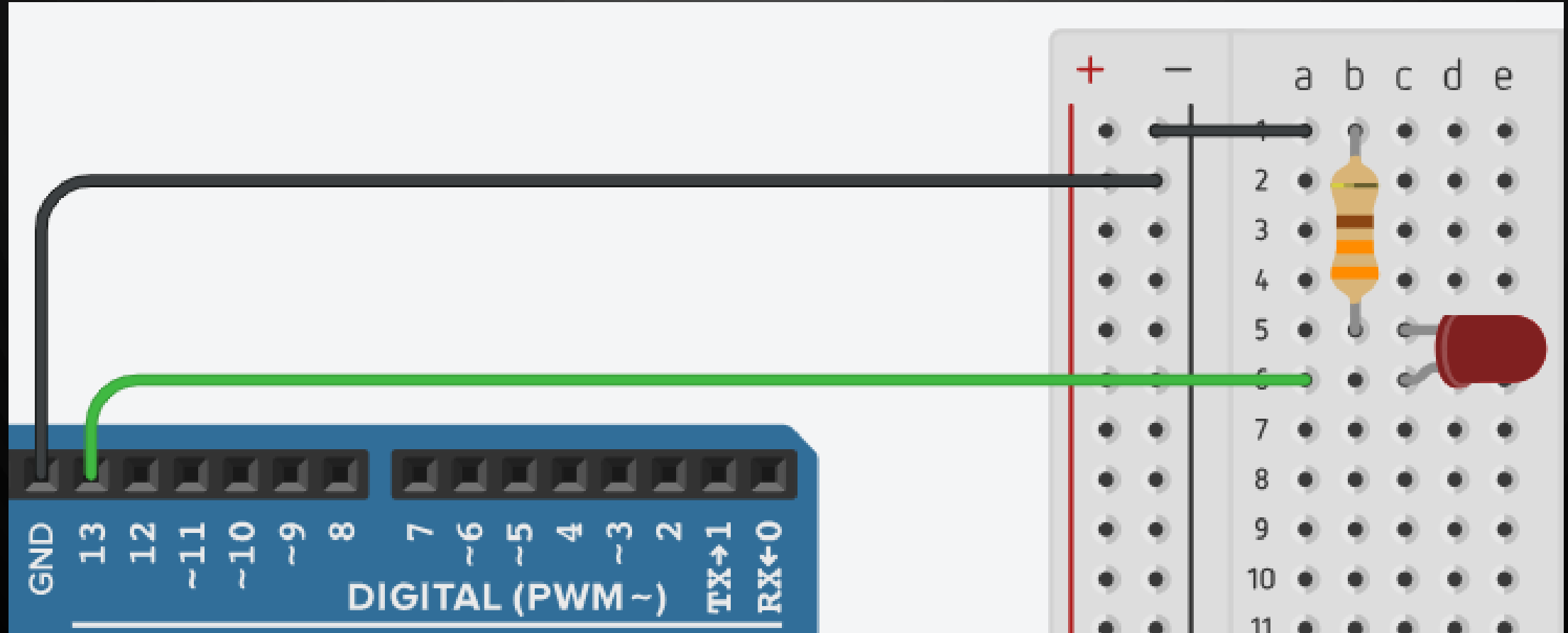
ARDUINO IDE

LED ON/OFF – CODE

```
sketch_feb01b §
1
2
3  void setup() {
4    // put your setup code here, to run once:
5
6  }
7
8  void loop() {
9    // put your main code here, to run repeatedly:
10
11 }
```
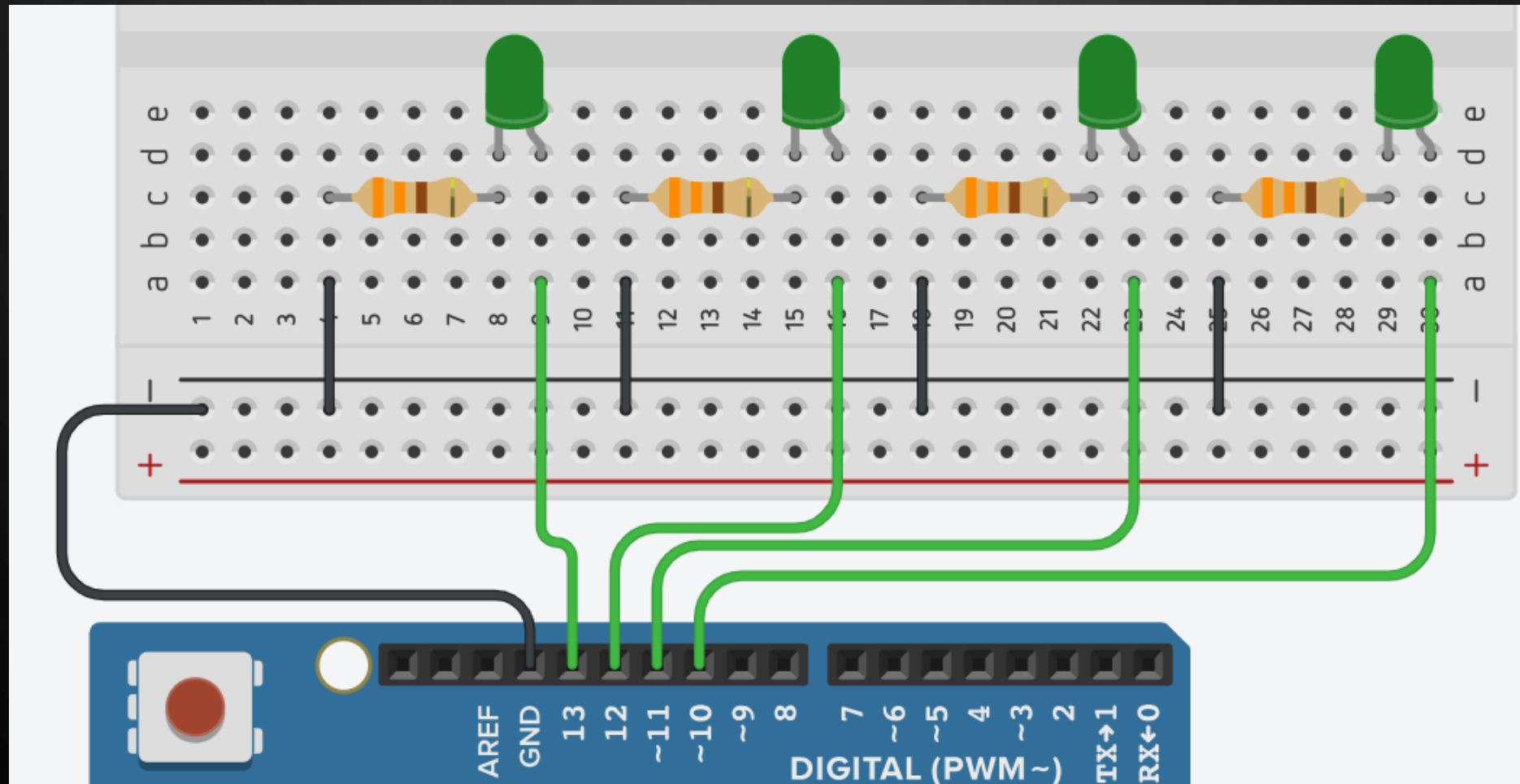
```
int pin = 13;
```

```
pinMode(pin, OUTPUT);
```

```
digitalWrite(pin, HIGH);
delay(1000);
digitalWrite(pin, LOW);
delay(1000);
```
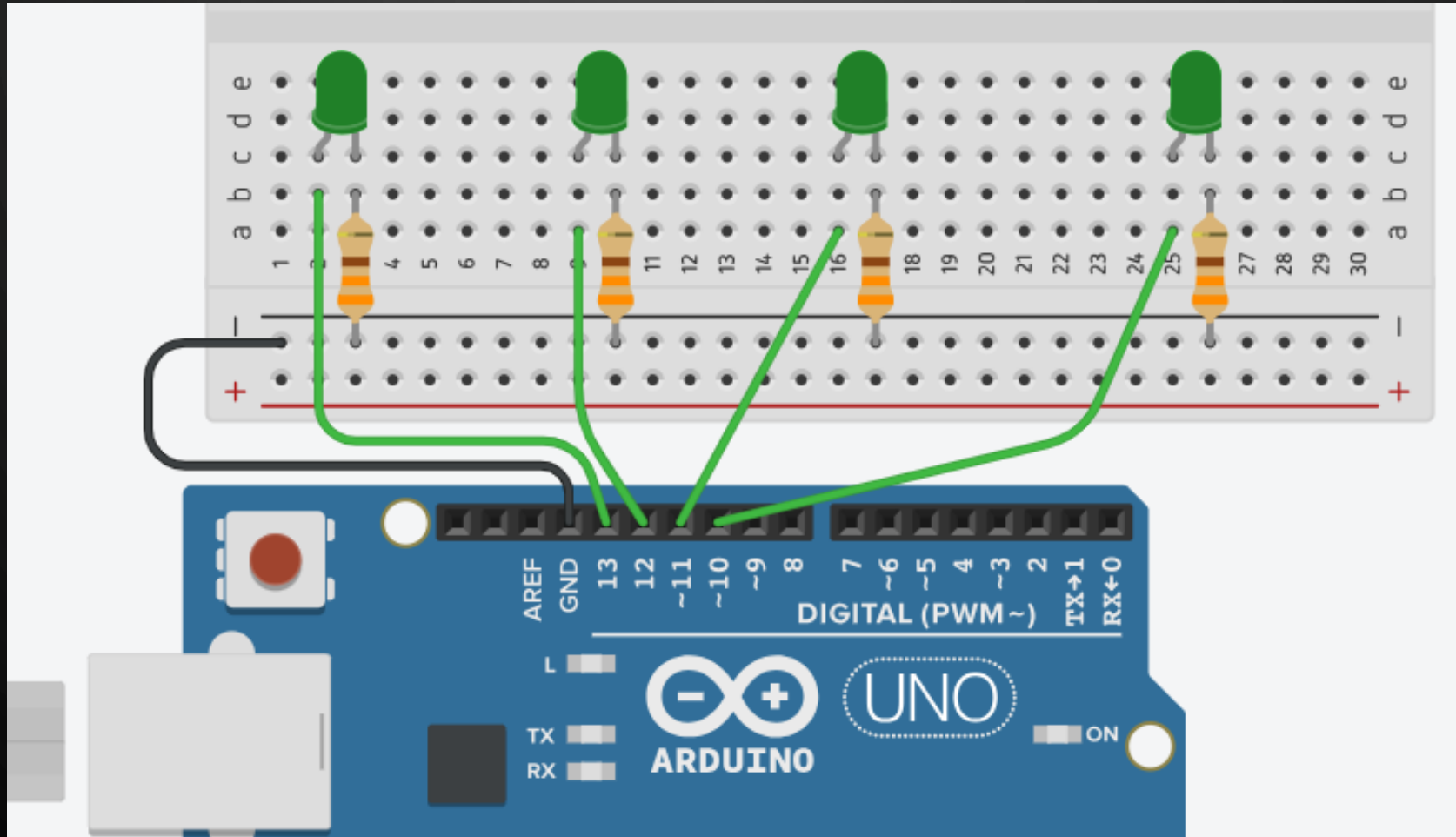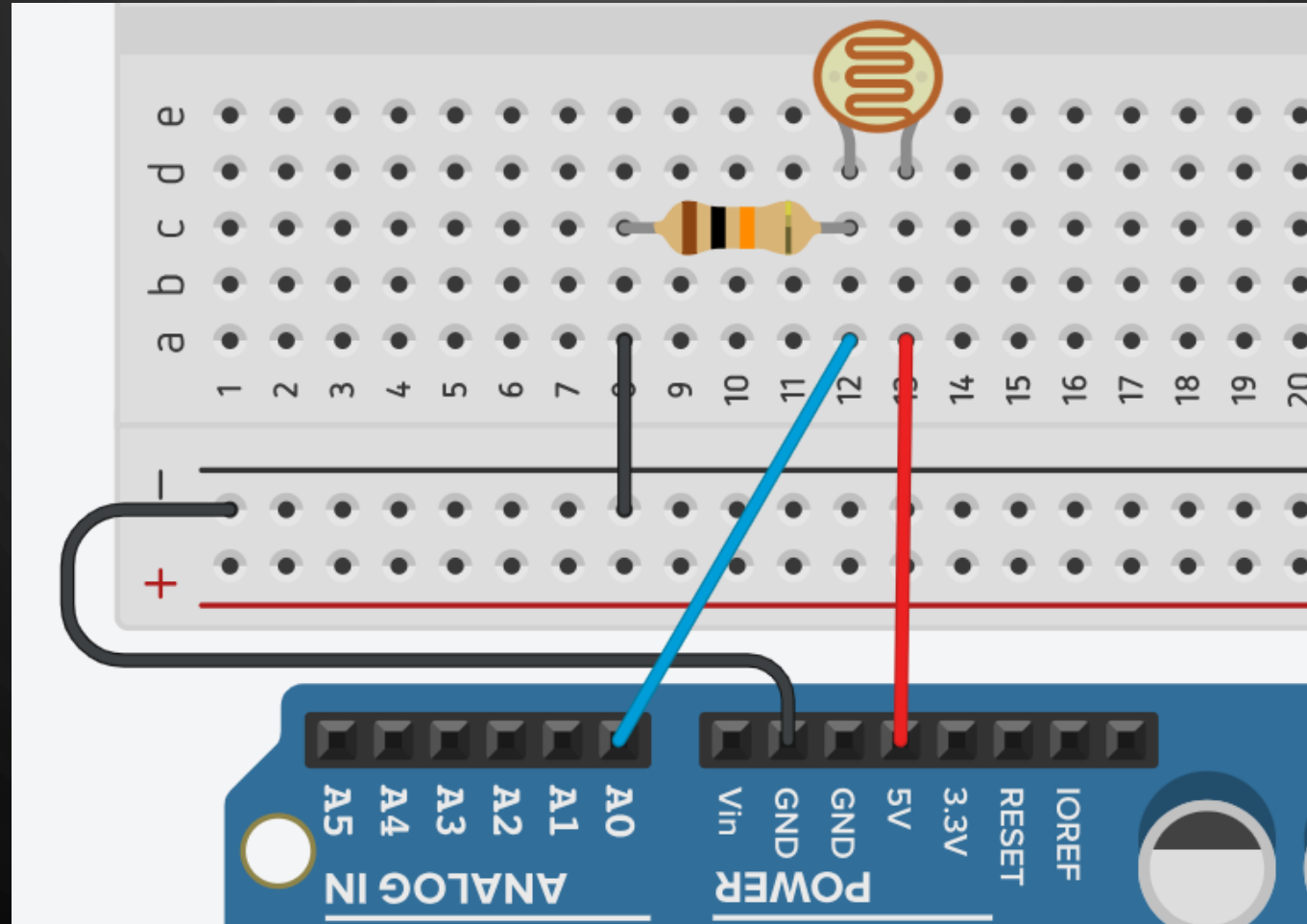
File Edit Sketch Tools Help

Verify & Upload

LEDS

LEDS (ALTERNATIVE HOOKUP)

FourLEDs.ino

PHOTORESISTOR

Photoresistor.ino

SENSOR

PhotoLED.ino