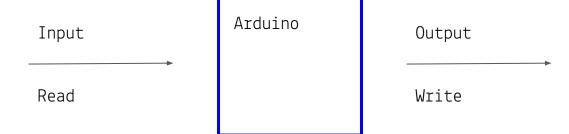
# Actuating

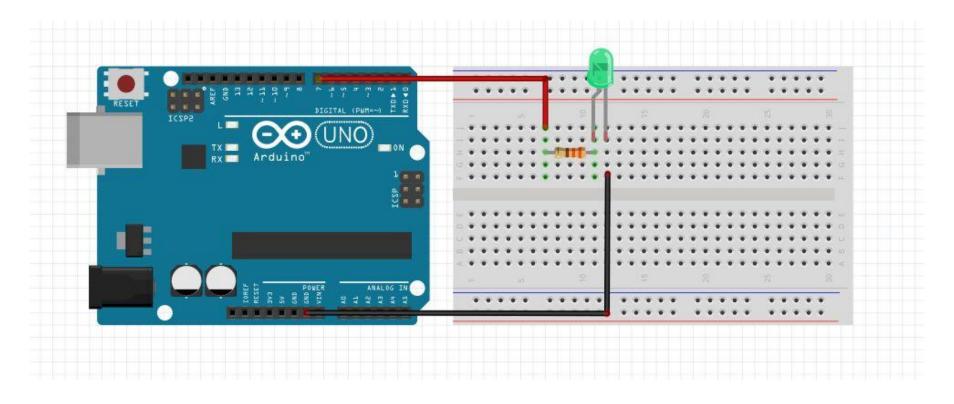
Day 2

#### Input vs Output

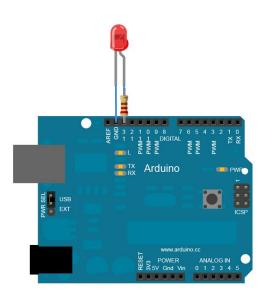


### **Digital Actuation**

#### Our First Circuit



#### Our First Circuit



- The LED's short leg/flat edge goes to GND
- Resistor "in series" with the LED
- Resistors don't have polarity

### pinMode(pinNumber, mode)

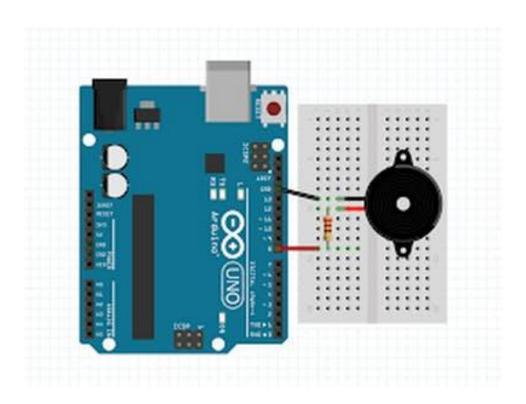
Fundamental modes: INPUT/OUTPUT

## digitalWrite(pinNumber, VALUE)

HIGH / LOW

delay(milliseconds)

#### Piezo Circuit



### **Analog Actuation**

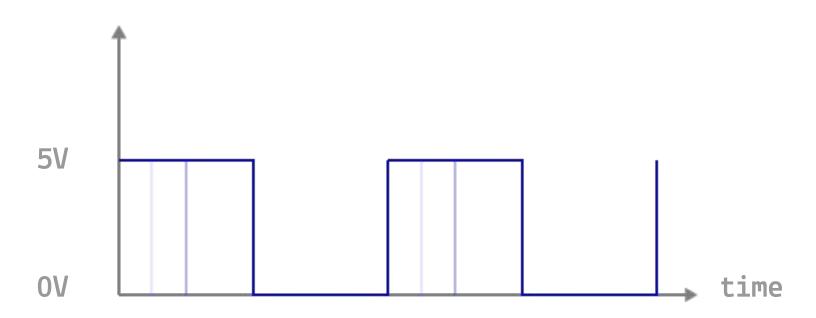
### pinMode(pinNumber, mode)

Fundamental modes: INPUT/OUTPUT

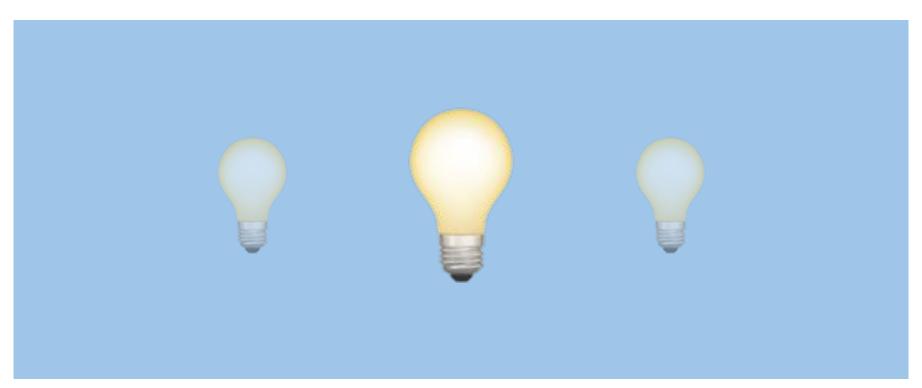
## analogWrite(pinNumber, value)

0-255 Use pins with  $\sim$ 

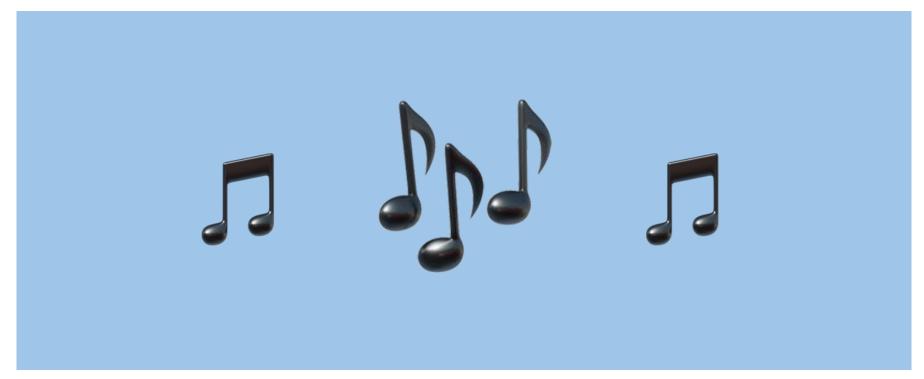
#### **PWM**



#### LED Fade



### Sound and tone()



#### Coding Challenge nr 1



