**Gas Sensor:**

Circuit Connections:

Gas Sensor (MQ-8):

VCC: Connect to the Arduino 5V pin.

GND: Connect to the Arduino GND pin.

AO (Analog Output): Connect to the Arduino analog pin A0 (mq8Pin).

Buzzer:

Positive (+): Connect to pin 2 (ledPin\_1).

Negative (-): Connect to pin 3 (ledPin\_2).

Green LED:

Positive (+): Connect to pin 13 (ledPin\_3).

Negative (-): Connect to pin 12 (ledPin\_4), with a resistor in series.

Red LED:

Positive (+): Connect to pin 6 (ledPin\_5).

Negative (-): Connect to pin 7 (ledPin\_6), with a resistor in series.

**ULTRA SONIC:**

**Connections**

1. **Ultrasonic Sensor (HC-SR04):**
   * **VCC**: Connect to the 5V pin on the Arduino.
   * **GND**: Connect to the GND pin on the Arduino.
   * **Trig (Trigger Pin)**: Connect to **pin 2** on the Arduino.
   * **Echo (Echo Pin)**: Connect to **pin 3** on the Arduino.
2. **Piezo Buzzer:**
   * **Positive (+)**: Connect to **pin 8** on the Arduino.
   * **Negative (-)**: Connect to **GND** on the Arduino.
3. **Power Supply:**
   * Power the Arduino using a USB connection to a computer or a 5V adapter.

**WATER LEVEL SENSOR:**

Connections

1. Water Level Sensor:
   * VCC: Connect to 5V on the Arduino.(+)
   * GND: Connect to GND on the Arduino.(-)
   * Signal (S): Connect to A3 (Analog Pin 3) on the Arduino.
2. Arduino Power:
   * Power the Arduino using a USB connection to a computer or a 5V adapter.

**LED FADE IN FADE OUT:**

**Connections**

1. **LED Positive (Anode) Pin:**
   * Connect the **long leg (anode)** of the LED to a **220-ohm resistor**.
   * Connect the **other end of the resistor** to **Pin 9** on the Arduino (PWM pin).
2. **LED Negative (Cathode) Pin:**
   * Connect the **short leg (cathode)** of the LED directly to the **GND (Ground)** pin on the Arduino.
3. **Resistor Placement:**
   * The resistor can be placed either before or after the LED in the circuit.