

2.Blinking LED using Arduino Uno.

Arduino pin 13 → Resistor → LED (Positive)

LED (Negative) → GND

3.An experiment to implement digital input and output using Arduino.

LED: pin 10 → resistor → LED(big) → GND

Button: pin 12 → button → GND

4.Blink LED & Clap Control using KY-038

Sound Sensor: VCC–5V, GND–GND, D0–Pin 2

LED: Pin 13 → Resistor to big led pin → LED → GND

5.Ultrasonic Sensor HC-SR04

VCC → 5V

GND → GND

TRIG → Pin 12

ECHO → Pin 13

6.Ultrasonic Sensor HC-SR04 and buzzer.

HC-SR04: VCC–5V, GND–GND, Trig–9, Echo–10

Buzzer: +(big pin) → Pin 8, – → GND

7.Light control system using Ultrasonic Sensor HC-SR04 and buzzer.

Ultrasonic: VCC–5V, GND–GND, TRIG–12, ECHO–13

Buzzer: + -> Pin 7 → Buzzer - -> GND

LED: Pin 10 → Resistor → LED → GND

8.Detect darkness using LDR.

LDR: 5V → LDR → A0 → 10kΩ → GND

LED: Pin 13 → Resistor → LED → GND

9.Detect gas leak detection

MQ-2: VCC–5V, GND–GND, AO–A0

LED: Pin 13 → Resistor → LED → GND

Buzzer: Pin 12 → Buzzer → GND

10.Human movement using PIR motion

PIR: VCC–5V, GND–GND, OUT–Pin 2

LED: Pin 13 → Resistor → LED → GND

11.obstacles using IR Sensor.

IR: VCC–5V, GND–GND, OUT–Pin 2

LED: Pin 13 → Resistor → LED → GND