

HAND CLAP SWITCH

Introduction:

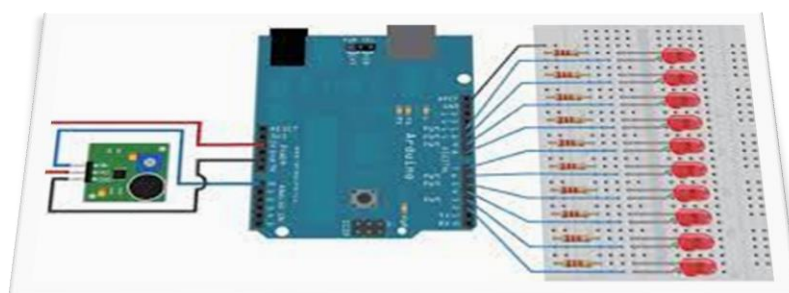
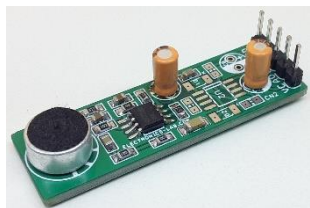
The project aims to create clap-activated LED lights using an Arduino Uno, a sound sensor, and LED lights. The system detects a clap sound through the sound sensor and triggers the LED lights to turn on and off accordingly.

Components:

1. Arduino Uno
2. Sound Sensor
3. LED Lights
4. Jumper Wires
5. Breadboard

Wiring Connection:

- Connect sound sensor VCC to Arduino 5V.
- Connect sound sensor GND to Arduino GND.
- Connect sound sensor OUT to Arduino digital pin (e.g., D2).
- Connect LED positive leg to Arduino digital pin (e.g., D13).
- Connect LED negative leg to Arduino GND.



Arduino code

sketch_jan5a | Arduino IDE 2.2.1

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sketch_jan5a.ino



```
1  const int soundSensorPin = 2; // Sound sensor OUT pin
2  const      // LED pin
3
4  void setup() {
5      pinMode(soundSensorPin, INPUT);
6      pinMode(ledPin, OUTPUT);
7  }
8
9  void loop() {
10     int soundValue = digitalRead(soundSensorPin);
11
12     if (soundValue == HIGH) {
13         digitalWrite(ledPin, HIGH);
14         delay(500);
15         digitalWrite(ledPin, LOW);
16     }
17 }
18
```

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