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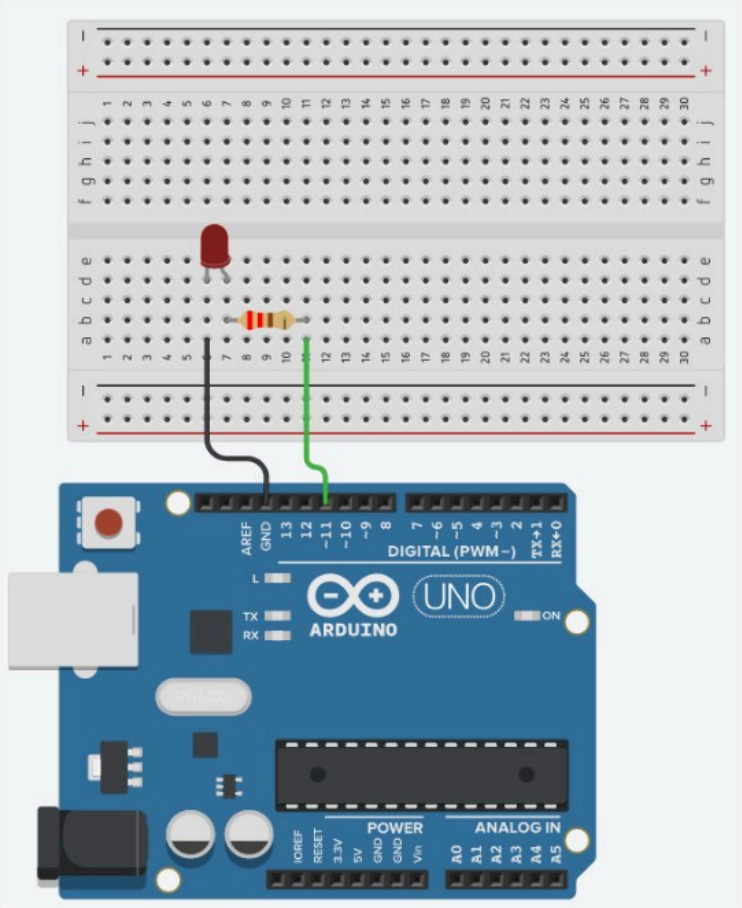
Experiment No 1 : Blinking LED

Blinking LED turns on an LED on for one second, then off for one second, repeatedly.

Sketch:

#define LED 11 //Declare LED at pin 11




```
void setup() {
  // put your setup code here, to run or
  pinMode(11, OUTPUT);  //Sets pin 11 as
output
```

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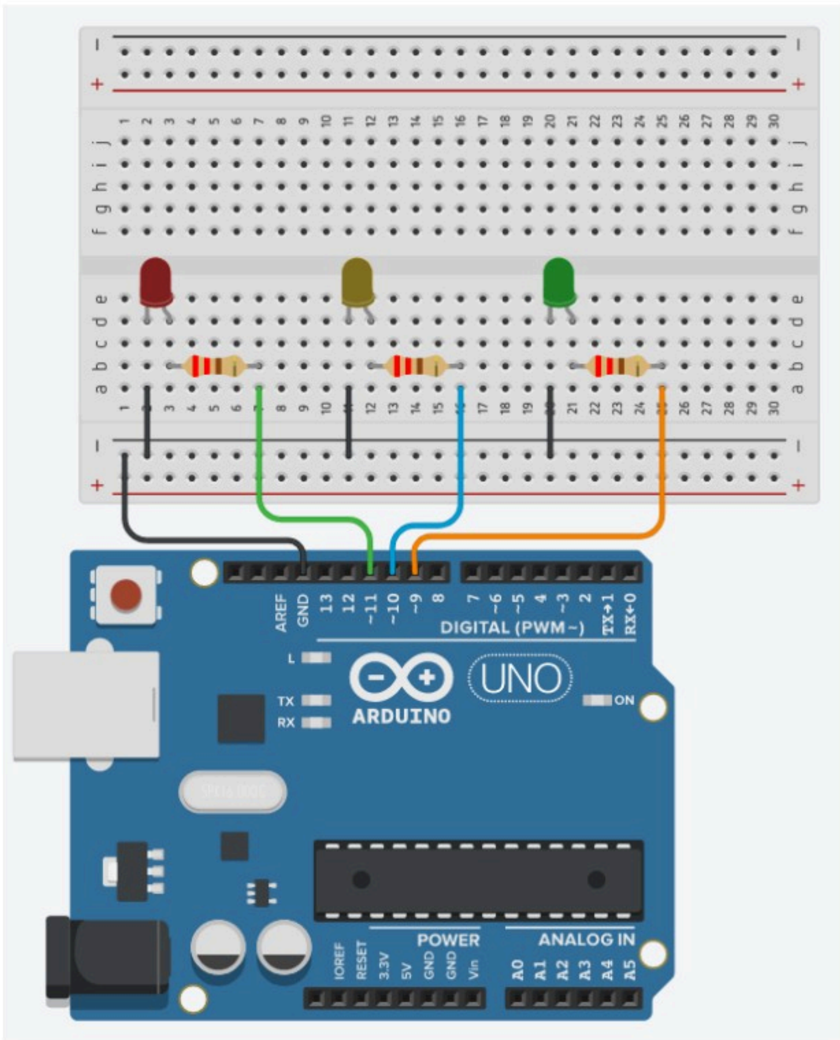
Page Break

Experiment No 2 : Traffic Lights LED




```
void setup() {

  // initialize digital pin LED_BUILTIN as an output.

  pinMode(8, OUTPUT);

  pinMode(9, OUTPUT);

  pinMode(10, OUTPUT);

}



// the loop function runs over and over again
```

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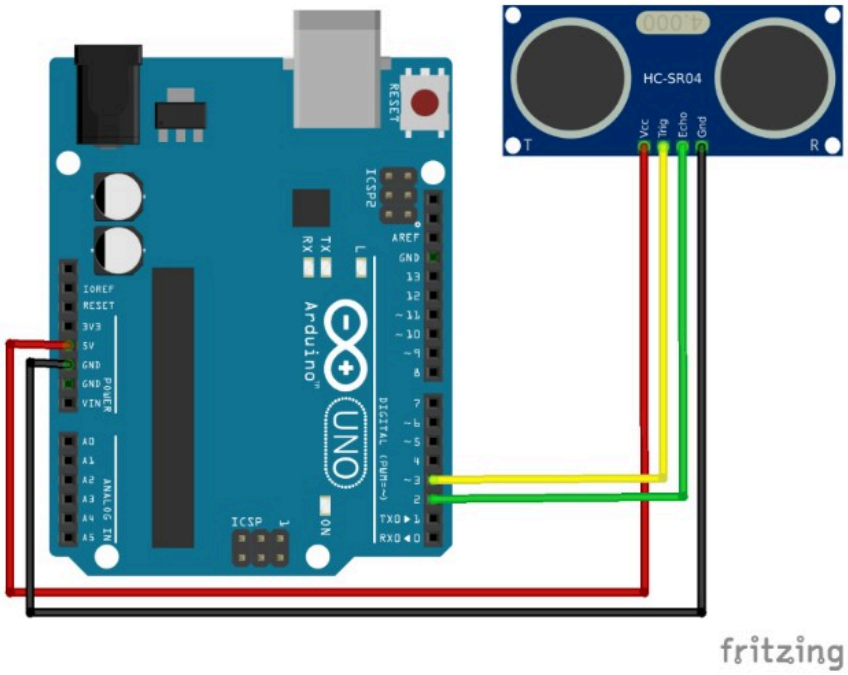
Not saved yet



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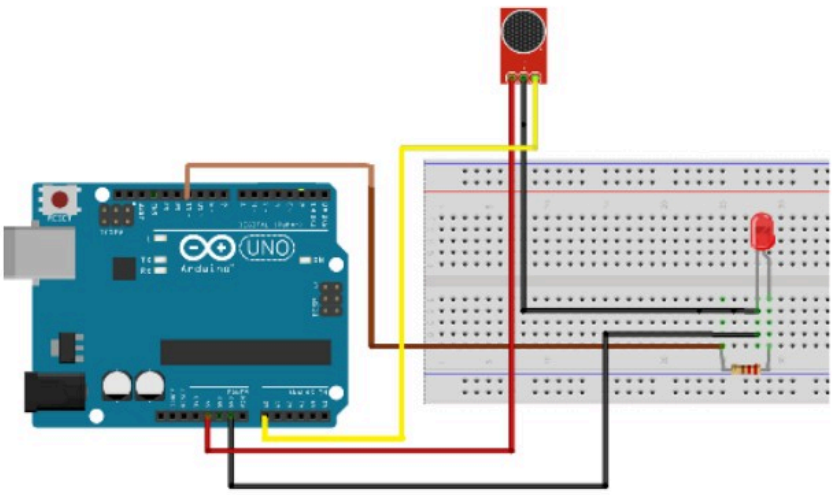
Experiment No 4 : Clap Switch

The sound sensor module makes it simple to detect sound and is commonly used to determine sound intensity. For protection, switching and monitoring applications, this module can be used. It is easy to adjust its precision to ease of use. It uses a microphone that provides an amplifier, high detector, and buffers for the signal.
When a sound is detected, the sensor generates an output signal voltage, which is then sent to a micro-controller, which performs the required processing.
The sound detector sensor module for Arduino determines whether or not sound has crossed a predefined threshold value. A microphone detects sound, which is then fed into an LM393 op-amp**.** An onboard potentiometer is used to change the sound level set point. As the sound frequency reaches the threshold, an LED on the module illuminates and the output is reduced.



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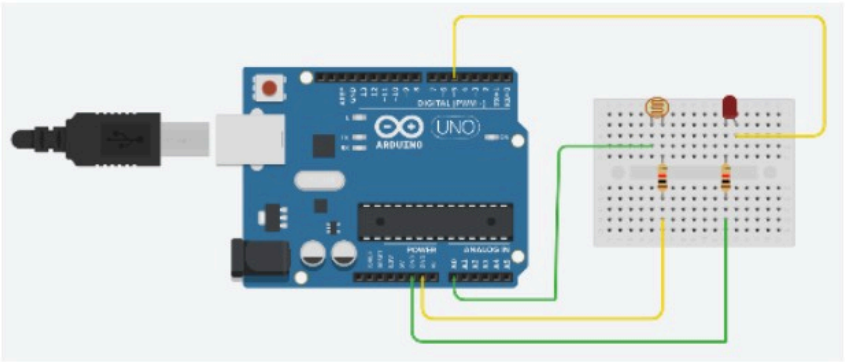
considered as the ground pin which should be connected to the ground of the system.



Working of the circuit : Basically when there is darkness the led will glow and when there is sufficient light led will stop glowing. This a simple circuit for of interface Arduino uno with LDR sensor.

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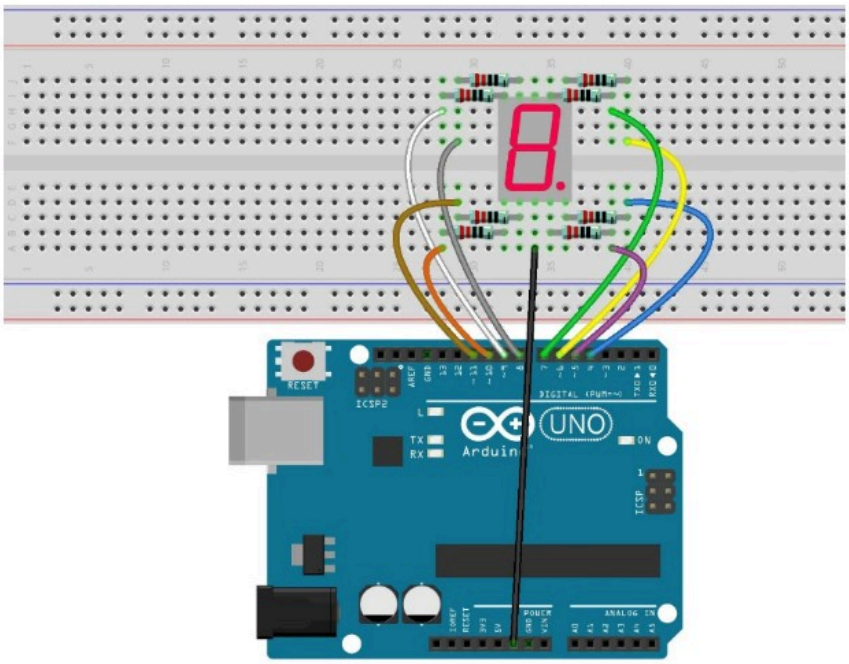
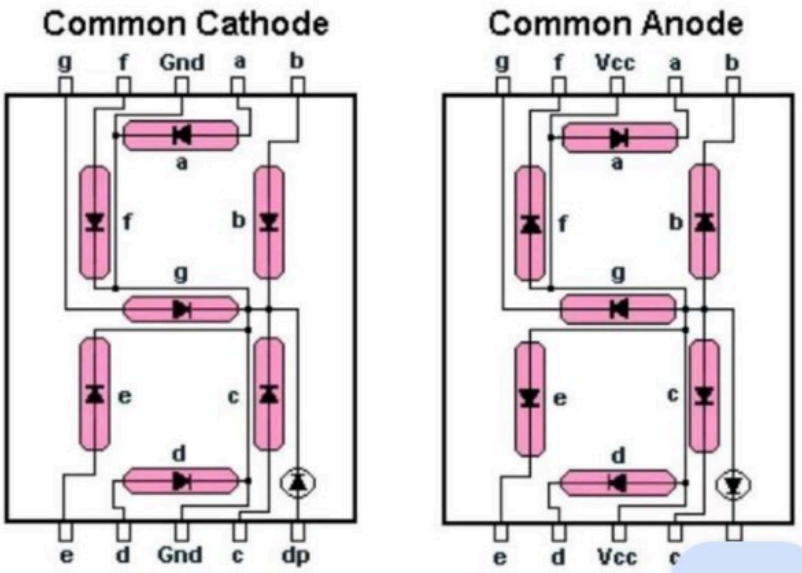
Experiment No 6 : Seven Segment Display





SSD Configuration

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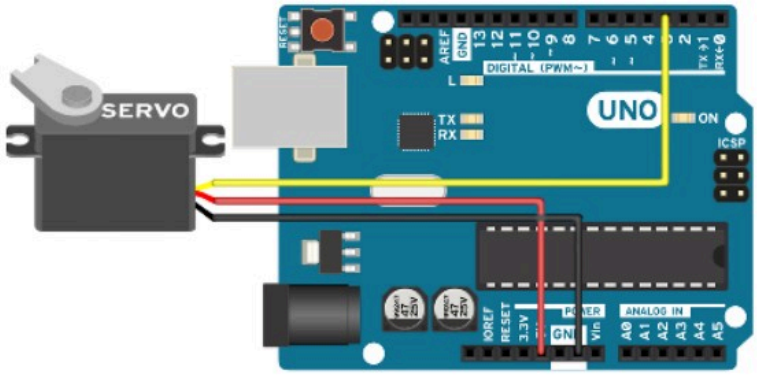
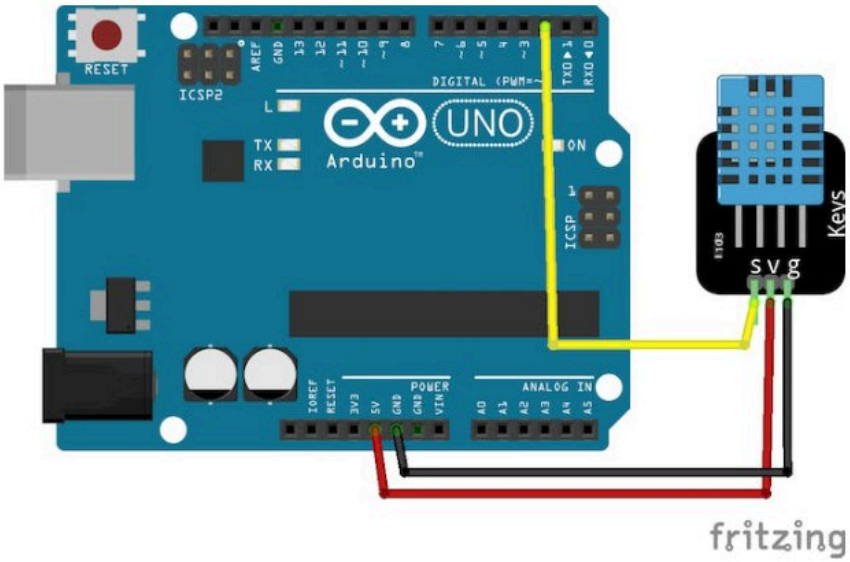
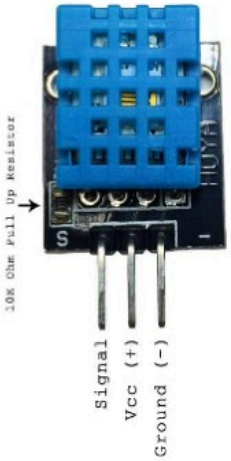
Experiment No 7 : Servo Motor




```
// Include the Servo library

#include<Servo.h>

// Declare the servo pin

int servoPin=3;

// Create a servo object

Servo Servo1;


void setup() {

  // We need to attach te servo to the used pin number

  Servo1.attach(servoPin);


}


void loop() {
```

Experiment No 8 : DHT Sensor






```
#include "DHT.h"
```