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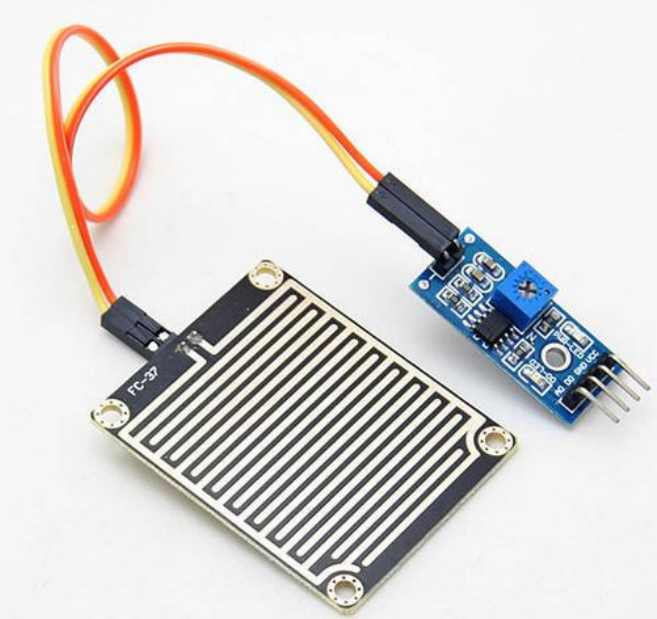
Interfacing of Raindrop Sensor

Raindrop sensor

- **The Raindrop sensor module** is used for rain detection. It is also for measuring rainfall intensity.
- The module includes a rain board and a control board that are separate for more convenience. It has a power indicator LED and an adjustable sensitivity though a potentiometer.



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Concept of Raindrop Sensor

- The module is based on the LM393 op amp. It includes a printed circuit board(control board) that "collects" the rain drops. As rain drops are collected on the circuit board, they create paths of parallel resistance that are measured via the op amp.

- The lower the resistance (or the more water), the lower the voltage output. Conversely, the less water, the greater the output voltage on the analog pin. A completely dry board for example will cause the module to output five volts.

Working of Raindrop Sensor

- In this project basically raindrop sensor senses **rain** when comes, LED will blink.
- A **Rain sensor** or **Rain** switch is a switching device activated by rainfall.
- As rain drops are collected on the circuit board, they create paths of parallel resistance that are measured via the opamp.

Components required

- Arduino Mega
- Raindrop sensor
- LED
- Breadboard
- Jumper wires

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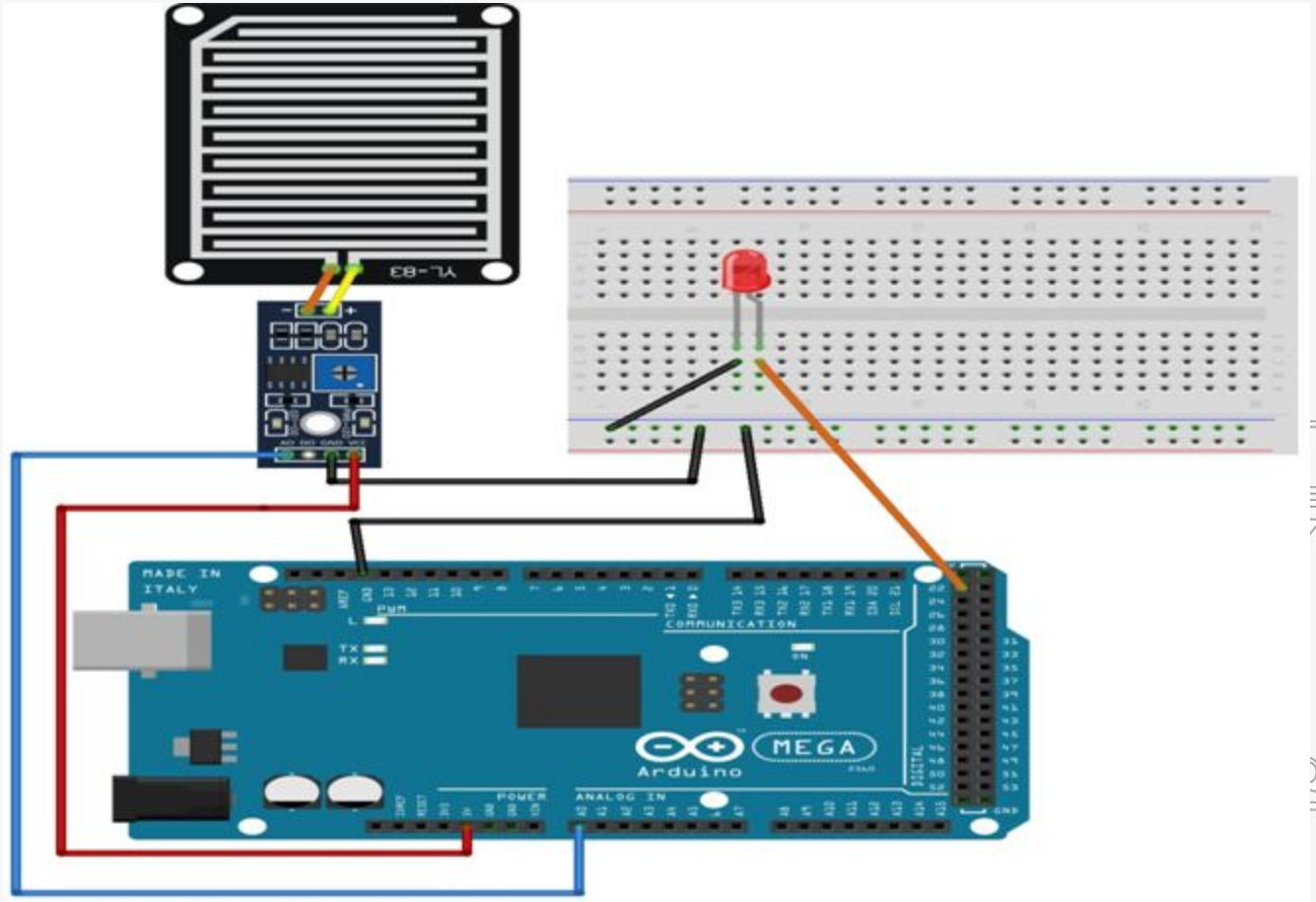
Connection Diagram



Connections

1. Connect Ao pin of raindrop sensor with Ao pin of Arduino.
2. Connect Vcc of sensor with +5V of Arduino.
3. Connect GND of sensor with GND Arduino.
4. Connect LED's positive with 22 pin of Arduino and negative pin with GND pin of Arduino.

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Code

raindrop | Arduino 1.8.19

File Edit Sketch Tools Help

raindrop

```
void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
//pinMode(A0,INPUT);
pinMode(22,OUTPUT);
}

void loop() {
  // put your main code here, to run repeatedly:
//
int data=analogRead(A0);
Serial.println(data);
if(data<600){
  digitalWrite(22,1);
  delay(2000);
}
  else{
  digitalWrite(22,0);
  delay(2000);
}}
```

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Project Link : https://youtu.be/tBHTN_bPIrM