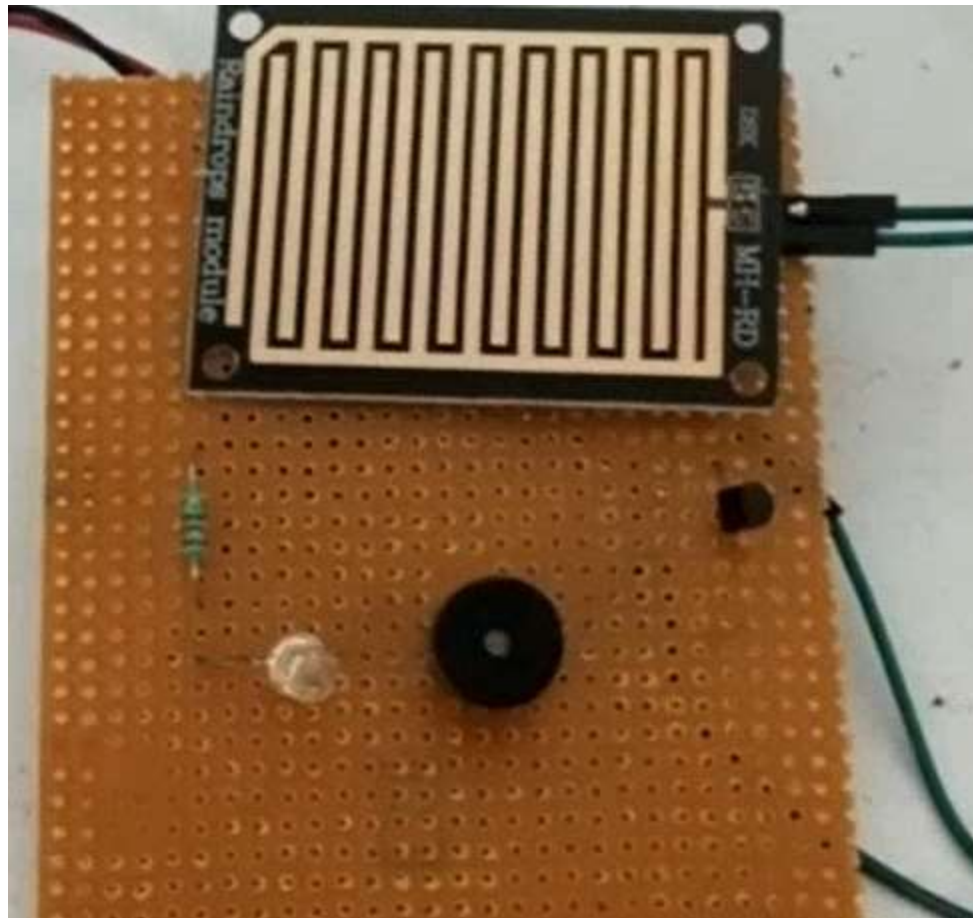


Rain Water Alarm



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 through a potentiometer.



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.

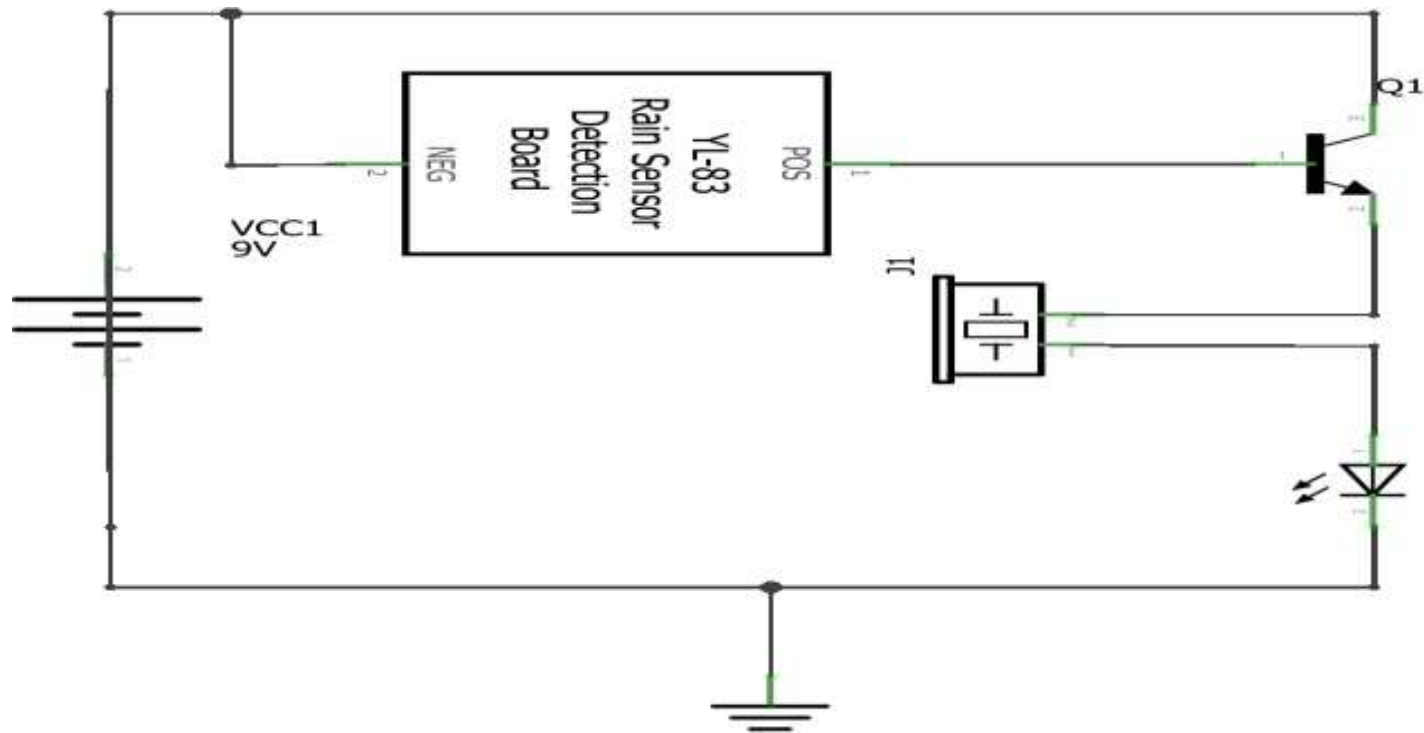
Working of Raindrop Sensor

- 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.

About Project

Rain Alarm Project is a simple but very useful project that detects Rain (Rain Water) and automatically triggers an alarm or buzzer. Rain water detector will detect the rain and make an alert.

Connection Diagram



Components Required

- Zero PCB
- Soldering iron
- Soldering Wire
- BC 547 Transistor
- Buzzer 5V-12V
- LED
- Resistor[220ohm]
- Rain Detector Plate
- 9V battery
- Battery Connector

Working of project

Rain Alarm is a device which is used to give the information is the rain is occurring as it gives sound when rain falls between the two aluminum rods. As the rain drop comes between the two rods the circuit gets completed then buzzer will create alarm indicating the falling of rain.

Future Scope

- In the irrigation, it will detect the rain and immediately alert the farmer.
- In automobiles, when the rain detector detects the rain it will immediately activate the wipers and inform the driver.
- In communications, it will boost the power of the antenna and increase the signal strength to send or receive the signals.
- In normal house hold, with the help of rain water detector we can automatically save the rain water.

Project Link : <https://youtu.be/4CoOCMDS3uw>