

Srinivasa Ramanujan Institute of Technology (Autonomous)

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PROJECT ABSTRACT

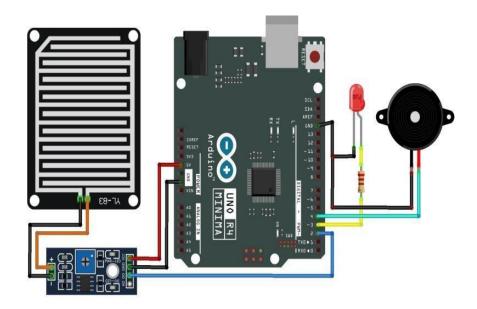
Batch No:2101

RAIN DETECTION SYSTEM

The rain detection project is designed to detect rain and automatically trigger an alarm and an LED indicator. The sensor acts as a switch that closes when it rains and remains open when it stops. This project is essential for water conservation, enabling rainwater harvesting and storage for future use. In automobiles, it can automatically activate windshield wipers, ensuring safety during rainy conditions. For household applications, the project helps collect and store rainwater, preventing wastage and enhancing groundwater levels. The addition of the LED component provides a clear visual alert, making the system more user-friendly and effective.

Overall, this reliable and cost-effective project can be easily constructed and serves multiple purposes. It is ideal for protecting materials from rain, aiding in efficient water use in vehicles, and facilitating rainwater harvesting at home. The visual alert from the LED ensures timely responses, promoting water conservation and proper usage. This project is a valuable tool for managing rainwater effectively in various settings.

Block Diagram:



Components:

- Arduino UNO
- RainDrop Sensor Module
- Buzzer
- LED
- 220-ohm Resistor
- Breadboard
- Type C USB Cable
- Connecting Wires