A close-up of a logo

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**Department of Computer Science and Engineering**

**Course Title:** Internet Of Things

**Code:** CSE406

**Section:** 1

**LAB-01**

**Submitted To**

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**Introduction**

In IoT applications, real-time monitoring of environmental parameters is critical. This lab explores water level detection using an analogue sensor interfaced with an Arduino UNO.

**Tools and Devices Used**

* Arduino UNO.
* Analog Water Level Sensor.
* Arduino IDE (v1.8+).
* USB Cable for Arduino.
* Serial Monitor (via Arduino IDE).

**Process**

**1. Sensor Setup:**

The water level sensor was powered through pin 7 (controlled digitally), and its analogue output was read from pin A0. A short delay was used to stabilize reading.

**2.Data Feedback:**  Sensor readings and water level status were printed to the serial monitor every second for live tracking.

**Arduino UNO Code:**

// Sensor pins

#define sensorPower 7

#define sensorPin A0

**int** val = **0**;

**void** **setup**() {

Serial.begin(**9600**);

pinMode(sensorPower, OUTPUT);

digitalWrite(sensorPower, LOW);

}

**void** **loop**() {

digitalWrite(sensorPower, HIGH);

delay(**10**);

val = analogRead(sensorPin);

digitalWrite(sensorPower, LOW);

Serial.println(val);

delay(**1000**);

}

**Conclusion:**

In this experiment, we successfully developed and tested an Arduino-based water level monitoring system using an analogue sensor.

**GitHub Link:** <https://github.com/Shairin207/IoT-Lab-Assignments>