Embedded Temperature Monitor Report

A. GitHub Repository Link

Repository Name: Embedded_Temperature_Monitor_Arduino_Enhanced

Example Link:

https://github.com/YourUsername/Embedded_Temperature_Monitor_Arduino_Enhanced

B. Brief Description of Code

This project uses an LM35 sensor to monitor ambient temperature in real-time using an Arduino UNO. The data is displayed via the serial monitor and LEDs to indicate temperature range.

C. QA Issues Logged

1. Temperature fluctuates due to noise.

2. LED not responding due to incorrect configuration.

3. Serial delay timing optimized for smoother output.

D. Collaboration Summary

- Kamlesh implemented the main Arduino logic.

- Teammates tested sensor performance and LED thresholds.

- QA issues were tracked via GitHub, ensuring version control and issue resolution transparency.

E. Learning Outcomes

- Learned interfacing LM35 temperature sensor with Arduino.

- Practiced GitHub workflows (issues, commits, pull requests).

- Gained hands-on understanding of analog data conversion and debugging.