**CODETECH Task-1**

**Intern Details**

* **Name**: S.S. Thirumalesh
* **Domain**: Internet of things(iot)
* **Member Type**: Individual

**TASK-1** **Progress Overview**

* **Task Assigned**:
  + Smart LED blinking
* **Work Done:**
  + Set up the platform for IOT Arduino.
  + Created folder for code using Arduino.
  + Implemented all the connections .
  + Tested by visual studio code using c ++.
  + Added some specific features .
  + Pushed Arduino code to GitHub repo.

**Project Details**

**Project Title:** Smart LED blinking

**Feature Implemented in Task-1 :**

* Project folder structure.
* Well-formatted Arduino code.
* Instructions given in command type

**Guidelines Followed:**

1. Kept commits meaningful and atomic.
2. Used by c++ code to changes by other users.
3. Clean and modular folder structure.
4. Committed and pushed changes with proper messages.

**GitHub Repository**

**GitHub Repository Link:**

*https://github.com/ThirumaleshFSD/codetech\_task1*

**Project Approach**

* **What were your thoughts when approaching the task?**

To create a clean and scalable to the approaching with asking detailed information on ChatGPT usage .

* **How did you plan to tackle the problem?**

Started by designing a simple schema for smart LED first clear approach on microcontrollers and discuss with my friend .

* **What steps did you take while working on the task?**
  + Setup project folder.
  + Installed dependencies.
  + Designed Arduino pins to connections.
  + Created Arduino code.
  + Pushed code to GitHub.
* **What did you learn from this process?**
  + Structuring the iot projects.
  + Writing code properly for our task requirement.
  + Connecting with code to Arduino .
  + Testing the code with completing the task

**Conclusion :**

The Smart LED Blinking project demonstrates the basic concept of IoT by using a microcontroller to control an LED with automated timing. It highlights how simple hardware and Arduino code can create a foundational system for smart automation. This project serves as a stepping stone toward more complex IoT applications involving remote control and real-time feedback.