1️⃣ IoT System Design with Arduino & Raspberry Pi – 4 Weeks

📅 Week 1: IoT Basics + Arduino

- What is IoT? Architecture & Components
- Intro to Arduino: IDE & Programming
- Basic Sensors (Temp, Light, Motion)
- Actuators (Relay, Motors, LEDs)

📅 Week 2: Raspberry Pi + Python

- Raspberry Pi OS Setup
- GPIO Programming in Python
- Pi Camera & Peripheral Interfacing
- Accessing Sensors via Pi

📅 Week 3: IoT Communication

- Wi-Fi + MQTT Protocols
- HTTP APIs & Blynk/ThingSpeak
- Cloud Data Upload
- Local Web Server with Flask

📅 Week 4: IoT Project & Demo

- Build an end-to-end IoT System
- Sensor Data → Raspberry Pi → Cloud Dashboard

🎯 **Mini Project**: Smart Health Monitor or Home Automation Dashboard