🔰 Project Name: SonorSense – Smart Alcohol Detection & Driver Restriction System

🧠 Project Concept

"SonorSense" ek smart system hai jo driver ke alcohol level ko detect karta hai. Agar alcohol detect hota hai to system driver ka photo capture karke uski face ID store karta hai aur car ko 3 ghante ke liye block kar deta hai. Naya driver aane par, face ID verify hoti hai aur agar alag driver hua to car unlock ho jati hai.

📋 Project Objectives

1. Prevent drunk driving by smart automation.
2. Identify and store the face of intoxicated drivers.
3. Block car for 3 hours after alcohol detection.
4. Allow new driver only after facial verification.
5. Use relay to control vehicle ignition/motor.

🔧 Required Hardware

- Arduino UNO
- MQ3 Sensor (Alcohol detection)
- Relay Module (To control motor/car power)
- DC Motor (for demo car engine)
- 16x2 LCD (JHD162A)
- Push Button (to re-trigger alcohol check)
- Power supply (Battery)
- Breadboard + jumper wires
- Camera Module (for face capture – can be USB webcam used with Python)
- Switch (for control/testing)

👷 Required Software

- Arduino IDE (For controlling hardware part)
- Python with OpenCV (For face capture and recognition)