Problem Statements

1. **Meme or Comic Challenge (Tech Edition)**
   Create memes or comics that humorously explain tech topics like bugs, Wi-Fi issues, or online exams.

2. **Video Presentation: "AI in Everyday Life"**
   Create a short presentation (2–3 minutes) explaining how AI is transforming industries.

3. **Weather Friend Bot**
   Make a concept map showing how an AI bot gives advice like "Carry an umbrella today" based on weather data.

4. **Smart Waste Bin**
   Design a block diagram showing how sensors detect when a bin is full and notify the cleaner.

5. **Cyber Safety Awareness Campaign**
   Create digital posters or a short presentation on "How to stay safe online" or "Avoiding phishing scams".

6. **Storyboard: "A Day with My AI Assistant"**
   Use 4–6 slides or panels to show how an AI helper makes daily life easier.

7. **Technology Timeline Poster**
   Create a visual timeline showing the evolution of computers or smartphones.

8. **Blinking LED Patterns**
   Create various LED blinking sequences (e.g. Morse code spells, SOS, recognizable patterns). Teaches digital output, timing, loops, delays.

9. **Light Sensor Based Automatic Night-Light**
   Use an LDR (light-dependent resistor) to detect ambient light; when it becomes dark, turn on LED(s); when light returns, turn off. Useful basic sensor input + threshold logic.

10. **Ultrasonic Distance Meter / Obstacle Detector**
    Use HC-SR04 ultrasonic sensor to measure distance to object; show reading or trigger LED/buzzer if something comes too close.

11. **Control LED with Push Button**

    Use Arduino UNO, Push button, LED, resistor.

12. **Traffic Light Simulation**
    Use Timing control, sequence logic.

13. **Buzzer Sound Alarm**

Use Buzzer, resistor.

14. **Temperature Display using LM35 Sensor**

    Use LM35 sensor, Arduino UNO.