Temperature Monitoring in Cold Storage Facilities using TMP36

Create a robust temperature monitoring system tailored for cold storage facilities, using the TMP36 sensor on an Arduino Uno R3.

Hardware:

- Arduino Uno R3
- TMP36 Temperature Sensor
- 16x2 LCD Display
- Piezo Buzzer and LED
- Breadboard and wires

Objective:

The primary goal is to implement a precise temperature monitoring mechanism within cold storage environments, ensuring the safety and quality of stored products.

Some specific objectives might be:

1. **Real-time Temperature Display:** Provide real-time temperature readings using LCD, facilitating immediate assessment of storage conditions.
2. **Temperature Alert System:** Implement an alert system utilising the buzzer and LED to promptly notify operators when temperature levels surpass predefined safety thresholds.
3. **Data Acquisition and Recording**: Capture temperature data at regular intervals to create a comprehensive record of temperature variations over time.

Overall, the objectives revolve around maintaining precise temperature control, preventing spoilage, ensuring regulatory compliance, and optimizing operational efficiency within the cold storage facility.

This would as a result enhance operational efficiency and product quality maintenance within cold storage facilities.

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