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#include <LiquidCrystal.h>
// Initialize the LCD with the pins you're using:
LiquidCrystal lcd(12, 11, 5, 4, 3, 2); // RS, E, D4, D5, D6, D7
const int tempPin = A0;  // TMP36 or LM35 connected to analog pin A0
void setup() {
  lcd.begin(16, 2);      // Initialize a 16x2 LCD
  lcd.print("Temp Monitor");
  delay(2000);
  lcd.clear();
}
void loop() {
  int sensorValue = analogRead(tempPin);        // Read analog input
  float voltage = sensorValue * (5.0 / 1023.0);  // Convert to voltage
  // TMP36: 0.5V = 0°C, 10mV per °C
  float temperatureC = (voltage - 0.5) * 100.0;  // Celsius
  // For LM35 (no 0.5V offset), use this instead:
  // float temperatureC = voltage * 100.0;
  // Display temperature on LCD
  lcd.setCursor(0, 0);
  lcd.print("Temp: ");
  lcd.print(temperatureC);
  lcd.print((char)223); // Degree symbol
  lcd.print("C");
  delay(1000);  // Refresh every second
}
```