

Conclusion

1. Displaying Current Room Temperature on 16x2 LCD Display:

- A View current room temperature on 16x2 LCD screen
- Utilize a temperature sensor to measure the room temperature.
- Measure room temperature with thermometer. Immediately observe the sensor's output.

2. Rotating Servo Motor Based on Potentiometer Value:

- Connect a potentiometer to the Arduino to provide variable input.
- Program the Arduino to read the potentiometer value and control the servo motor's rotation angle accordingly.
- This experiment demonstrates the use of analog input to control the position of a servo motor.

3. Rotating Servo Motor Based on Current Room Temperature:

- Measure the room temperature using a sensor.
- Map the temperature values to servo motor positions.
- Adjust the servo motor's rotation based on the current room temperature.
- This experiment combines sensor data with actuator control to create a temperature- responsive system.

Together, these experiments demonstrate the effectiveness of Arduino in interacting with sensors, outputting data, and controlling actuators.