Diagram 1: LCD Display Connection with Arduino

This diagram demonstrates how to connect an LCD screen to an Arduino Uno using a breadboard. The key components are:

- Arduino Uno: The microcontroller board used to control the display.
- **Breadboard**: Serves as the connection platform for wiring.
- LCD Screen: The output device for displaying information.
- The wiring shows how the Arduino's digital pins connect to the LCD's pins, enabling communication. Power and ground connections ensure the circuit is operational.

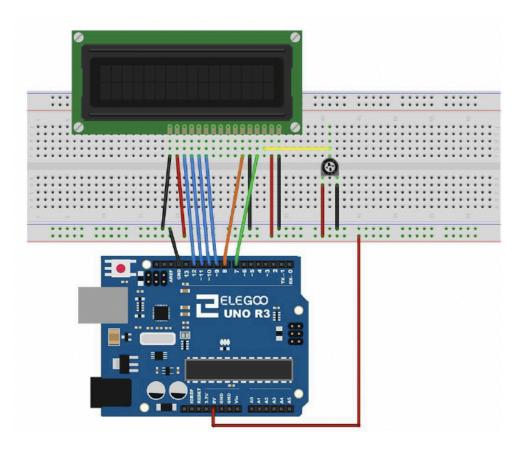


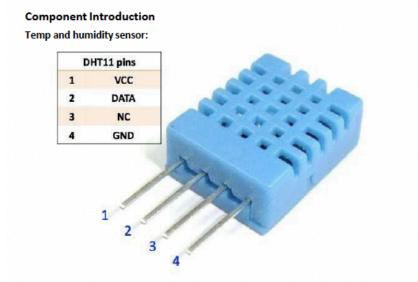
Diagram 2: DHT11 Temperature and Humidity Sensor Overview

This diagram introduces the DHT11 sensor, a key component for measuring temperature and humidity. Key points:

• Pins:

- 1. **VCC**: Connects to the power supply (3.3V or 5V from the Arduino).
- 2. **DATA**: Transmits the sensor's readings to the Arduino.
- 3. NC: Not connected (unused pin).
- 4. **GND**: Connects to the ground.

• The DHT11 is a composite sensor designed for reliable temperature and humidity sensing, often used in environmental monitoring projects.



DHT11 digital temperature and humidity sensor is a composite Sensor which contains a calibrated digital signal output of the temperature and humidity. The dedicated digital modules collection technology and the temperature and humidity sensing technology are applied to ensure that the product has high reliability and

Diagram 3: Wiring Diagram for DHT11 Sensor

This wiring diagram illustrates the connections between the DHT11 sensor and the Arduino Uno:

- VCC Pin: Connected to the Arduino's 5V pin for power.
- DATA Pin: Connected to a digital input pin on the Arduino to read sensor data.
- **GND Pin**: Connected to the Arduino's ground pin. This configuration enables the Arduino to receive data from the sensor for processing and display on the LCD or serial monitor.

