

## MATERIALS AND EQUIPMENT

The following materials and equipment were used to complete the experiment on Liquid Crystal Displays (LCD) with Arduino:

1. Arduino Uno Board
2. Liquid Crystal Display (LCD)
3. LM35 Analog Temperature Sensor
4. Potentiometer
5. Connecting Wires
6. Breadboard
7. Arduino IDE (Software)

## PROCEDURE

The following steps were followed to complete the experiment and display temperature reading on LCD screen:

1. Connect A0 of Arduino to number 2 pin of the temperature sensor. Connect pin 1 and 2 of the sensor to 5V and ground (GND) respectively
2. Connect 5,4,3, and 2 pins of the Arduino to the D4, D5, D6, and D7 of the LCD pins respectively.
3. Connect pin 12 and 11 of the Arduino to the RS and E pin of the LCD.
4. Connect LCD pin 1 and 16 to the ground (GND) and pin 2 and 15 to the 5V.
5. Connect the middle pin of the potentiometer to the pin 3 in LCD. Connect other two pins of the potentiometer to the ground and 5V.
6. Upload the required code for temperature reading the observe the LCD screen.