

```
#include <LiquidCrystal.h>

// LCD pin connection (RS, E, D4, D5, D6, D7)
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

int tempPin = A0;    // LM35 output
                     // connected to A0

void setup()
{
    lcd.begin(16, 2);
    Serial.begin(9600);

    lcd.print("Temp Monitor");
    delay(2000);
    lcd.clear();
}

void loop()
{
    int sensorValue = analogRead(tempPin);

    // Convert ADC value to temperature
    float voltage = sensorValue * (5.0 / 1023.0);
    float temperature = voltage * 100.0; //
    LM35 = 10mV per °C

    // Display on LCD
    lcd.setCursor(0, 0);
    lcd.print("Temperature:");
    lcd.setCursor(0, 1);
    lcd.print(temperature);
    lcd.print(" C   ");

    // Display on Serial Monitor
    Serial.print("Temperature: ");
    Serial.print(temperature);
    Serial.println(" C");

    delay(1000);
}
```

Temperature:
30.45 C



Serial Monitor Output Example

```
Temperature: 29.87 C
Temperature: 30.02 C
Temperature: 30.41 C
Temperature: 30.63 C
```

