

## Temperature in fahrenheit and Max / Min temp

```
int sensorPin = A0;    // LM35 connected to analog pin A0

float temperatureC;    // Current temperature in Celsius
float temperatureF;    // Current temperature in Fahrenheit
float maxTemp = -1000; // Initialize max temperature very low
float minTemp = 1000;  // Initialize min temperature very high

void setup() {
    Serial.begin(9600); // Start serial communication
    Serial.println("Temperature Monitoring Started...");
}

void loop() {
    int sensorValue = analogRead(sensorPin); // Read analog input (0–1023)
    temperatureC = (sensorValue * 5.0 * 100.0) / 1024.0; // Convert to Celsius
    temperatureF = (temperatureC * 9.0 / 5.0) + 32.0; // Convert to
    Fahrenheit

    // Update max and min values
    if (temperatureC > maxTemp) {
        maxTemp = temperatureC;
    }

    if (temperatureC < minTemp) {
```

```
    minTemp = temperatureC;
}

// Display readings
Serial.print("Current Temperature: ");
Serial.print(temperatureC);
Serial.print(" °C | ");
Serial.print(temperatureF);
Serial.println(" °F");

Serial.print("Maximum Temperature: ");
Serial.print(maxTemp);
Serial.print(" °C | ");
Serial.print(((maxTemp * 9.0 / 5.0) + 32.0));
Serial.println(" °F");

Serial.print("Minimum Temperature: ");
Serial.print(minTemp);
Serial.print(" °C | ");
Serial.print(((minTemp * 9.0 / 5.0) + 32.0));
Serial.println(" °F");

Serial.println("-----");
delay(2000); // Wait 2 seconds before next reading
}
```

## Connections:



