EXPERIMENT NO.– 11

Problem Statement:

Write a program so it displays the temperature in Fahrenheit as well as the maximum and minimum temperatures it has seen

Components Required:

- Arduino Board (UNO, Mega, etc.)
- Temperature Sensor (LM35 or DHT11)
- Breadboard
- Jumper Wires
- Arduino IDE

Circuit Connections:

- LM35 Temperature Sensor Pinout
  - VCC → 5V
  - GND → GND
  - Output → Analog Pin A0
- DHT11 Temperature Sensor Pinout
  - VCC → 5V
  - GND → GND
  - Data Pin → Digital Pin 2
  - Use a 10kΩ pull-up resistor between the VCC and Data Pin for stability.

Output:

The program successfully reads temperature values, converts them from Celsius to Fahrenheit, and continuously displays:

- The current temperature in Fahrenheit
- The maximum temperature recorded
- The minimum temperature recorded

Output:

Current Temperature: 98.6 °F
Maximum Temperature: 100.4 °F
Minimum Temperature: 95.0 °F