

## Experiment NO 9

write a program to show the temperature and show a graph of recent measurement

CODE :-

```
const int tempPin = A0; // LM35 connected to analog pin A0
```

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

```
void loop() {  
    int analogValue = analogRead(tempPin);  
  
    // Convert analog value to voltage float  
    voltage = analogValue * (5.0 / 1023.0);  
  
    // Convert to temperature (Celsius)  
    float temperatureC = voltage * 100;  
  
    // Send only number for Serial Plotter  
    // Serial.println(temperatureC);  
    // Serial.println("Temperature: ");  
    Serial.println("Temperature:", temperatureC, " °C");  
    // Serial.println(" °C");  
    delay(500); // refresh every 0.5s
```

}

OUTPUT:





