

ASSIGNMENT NO. 2

Aim: Design and implement parameter monitoring IoT system keeping records on Cloud such as 'environment humidity and temperature monitoring'.

Code:

```
const int tempPin = A0;  
const int humidityPin = A1;  
float temperature;  
int humidityValue;  
void setup() {  
    Serial.begin(9600);  
    Serial.println("Environment Monitoring System Started");  
}  
void loop() {  
    int tempReading = analogRead(tempPin);  
    temperature = (tempReading * 5.0 * 100.0) / 1024.0;  
  
    humidityValue = analogRead(humidityPin);  
    float humidity = map(humidityValue, 0, 1023, 30, 90);  
  
    Serial.print("Temperature: ");  
    Serial.print(temperature);  
    Serial.print(" °C | Humidity: ");  
    Serial.print(humidity);  
    Serial.println(" %");  
  
    delay(2000);  
}
```

Output:

```
Serial Monitor
```

```
74.71 °C | Humidity: 30.00 %
Temperature: 74.71 °C | Humidity: 30.00 %
Temperature: 74.71 °C | Humidity: 86.00 %
Temperature: 74.71 °C | Humidity: 90.00 %
```

