

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

