

## **SPRINT-2**

### **TO TRANSFER THE DATA TO THE CLOUD SERVICES.**

IBM IoT node is used to gather sensor data.

#### **SOURCE CODE:**

Temperature:   msg.payload.Temperature  
                  global.set('T',msg.payload)  
                  return msg ;

Humidity:       msg.payload.Humidity  
                  global.set('H',msg.payload)  
                  return msg ;

Gas:             msg.payload.Gas  
                  global.set('G',msg.payload)  
                  return msg ;

**Data sent to IBM IoT Watson:**

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various functions. The main content area displays the details for a device named 'Sivamadhavanece', which is currently 'Disconnected'. The device's ID is 'Sivamadhavan23' and it was last seen on 'Nov 5, 2022 8:12 AM'. Below this, there are tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs'. The 'Recent Events' tab is active, showing a table of recent data points.

Event	Value	Format	Last Received
IoTSensor	{"Temperature":28,"Humidity":36,"Gas":92}	json	a few seconds ago
IoTSensor	{"Temperature":60,"Humidity":80,"Gas":25}	json	a few seconds ago
IoTSensor	{"Temperature":94,"Humidity":87,"Gas":59}	json	a few seconds ago
IoTSensor	{"Temperature":89,"Humidity":98,"Gas":91}	json	a few seconds ago
IoTSensor	{"Temperature":1,"Humidity":95,"Gas":90}	json	a few seconds ago

## Data sent to Node-Red App:

The screenshot shows the Node-RED interface with a flow named 'Flow 3'. The flow starts with an 'IBM IoT' node (connected) that receives data from the IoT platform. This data is then processed by three function nodes: 'Temperature Node', 'Humidity', and 'Gas'. Each function node outputs to a corresponding 'msg.payload' node (Temperature, Humidity, Gas). These nodes are then connected to a 'msg.payload' node, which is further connected to an 'IBM IoT' node (connected) for sending data back to the platform. Additionally, there are 'Alarm on' and 'Alarm off' nodes connected to the 'msg.payload' node, and a '[get] /control' node connected to an 'http' node.

The debug console on the right shows the following log entries:

```

11/18/2022, 6:39:36 PM node: 96349bb2bd4fda5f
iot-
2/type/Sivamadhavan23/id/Sivamadhavanece/evt/IoTSens
: msg.payload: Object
{ Temperature: 1, Humidity: 95, Gas: 90 }

11/18/2022, 6:39:37 PM node: 96349bb2bd4fda5f
iot-
2/type/Sivamadhavan23/id/Sivamadhavanece/evt/IoTSens
: msg.payload: number
1

11/18/2022, 6:39:38 PM node: 96349bb2bd4fda5f
iot-
2/type/Sivamadhavan23/id/Sivamadhavanece/evt/IoTSens
: msg.payload: number
95

11/18/2022, 6:39:39 PM node: 96349bb2bd4fda5f
iot-
2/type/Sivamadhavan23/id/Sivamadhavanece/evt/IoTSens
: msg.payload: number
90

11/18/2022, 6:39:46 PM node: 96349bb2bd4fda5f

```

