

PROJECT DEVELOPMENT PHASE

SPRINT 3

TEAM ID PROJECT	PNT2022TMID34075
TITLE	IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

Step 1 : In order to display messages in IBM Iot Watson Platform First connect Node-red and Watson platform using your device details.

Step 2: Then provide connections as shown in below flow. Then obtain the output in Node-red as well as IBM IoT Watson Platform

Output: Displaying the value of Temperature and Humidity

NODE_RED FLOW AND OUTPUT

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow named 'Flow 1' with two nodes: 'IBM IoT' (blue) and 'msg.payload' (green). The 'IBM IoT' node is marked as 'connected'. The left sidebar shows the 'common' and 'function' node categories. The right sidebar shows the 'debug' console, which displays a list of messages received from the IoT device, each containing a timestamp, node ID, and a JSON payload with temperature and humidity values.

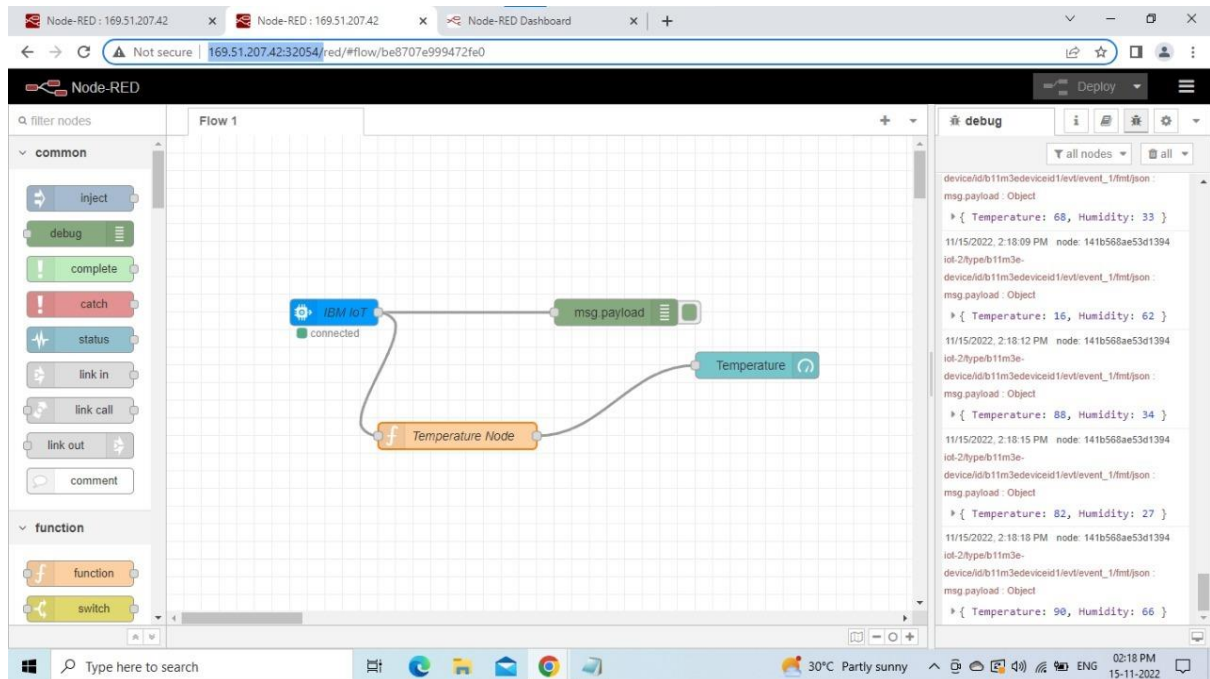
```
device/db11m3edevicid1/ev/event_1fnt/json :  
msg.payload : Object  
  { Temperature: 2, Humidity: 26 }  
11/15/2022, 1:52:19 PM node: 141b568ae53d1394  
iot-2/typeb11m3e-  
device/db11m3edevicid1/ev/event_1fnt/json :  
msg.payload : Object  
  { Temperature: 73, Humidity: 22 }  
11/15/2022, 1:52:22 PM node: 141b568ae53d1394  
iot-2/typeb11m3e-  
device/db11m3edevicid1/ev/event_1fnt/json :  
msg.payload : Object  
  { Temperature: 49, Humidity: 95 }  
11/15/2022, 1:52:28 PM node: 141b568ae53d1394  
iot-2/typeb11m3e-  
device/db11m3edevicid1/ev/event_1fnt/json :  
msg.payload : Object  
  { Temperature: 76, Humidity: 6 }  
11/15/2022, 1:52:28 PM node: 141b568ae53d1394  
iot-2/typeb11m3e-  
device/db11m3edevicid1/ev/event_1fnt/json :  
msg.payload : Object  
  { Temperature: 4, Humidity: 72 }
```

OUTPUT IN IBM IOT PLATFORM

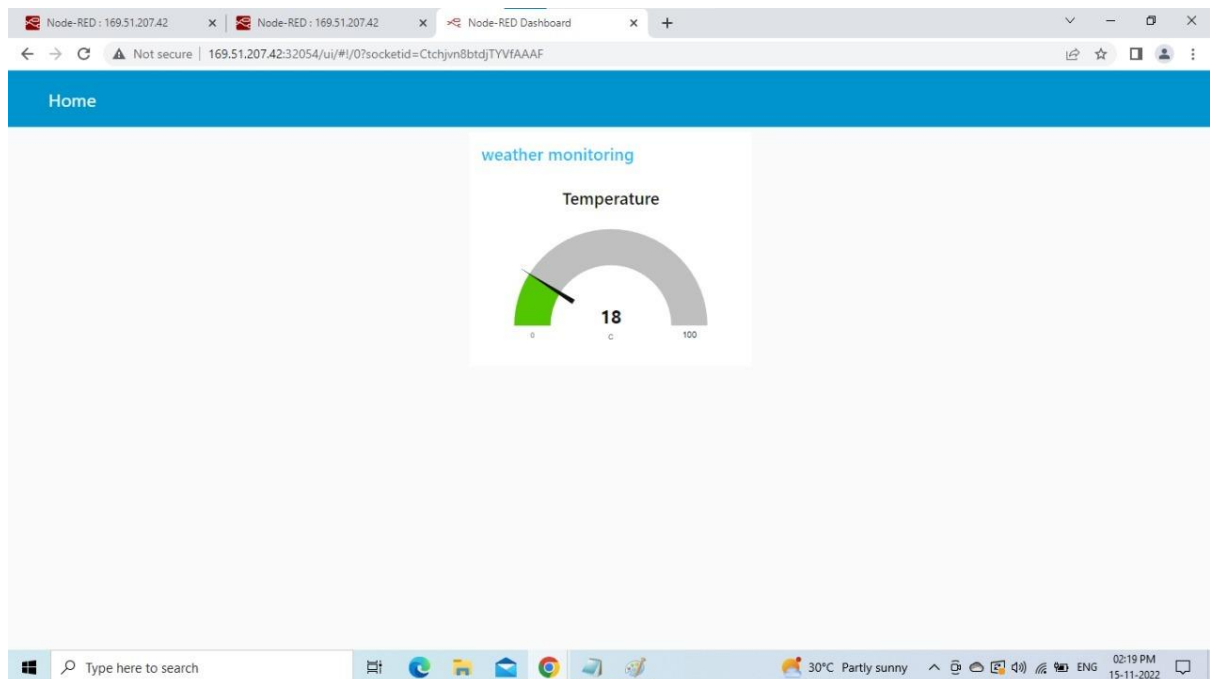
The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A sidebar on the left contains icons for various IoT functions. The main content area is titled 'Recent Events' and shows a table of live data streams. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. It lists five events, each with a unique ID and a JSON payload containing temperature and humidity data. A status message at the bottom right indicates '1 Simulation running'. The bottom of the image shows a Windows taskbar with the date and time as 01:53 PM on 15-11-2022.

Event	Value	Format	Last Received
event_1	{"Temperature":17,"Humidity":77}	json	a few seconds ago
event_1	{"Temperature":21,"Humidity":32}	json	a few seconds ago
event_1	{"Temperature":67,"Humidity":76}	json	a few seconds ago
event_1	{"Temperature":15,"Humidity":27}	json	a few seconds ago
event_1	{"Temperature":84,"Humidity":26}	json	a few seconds ago

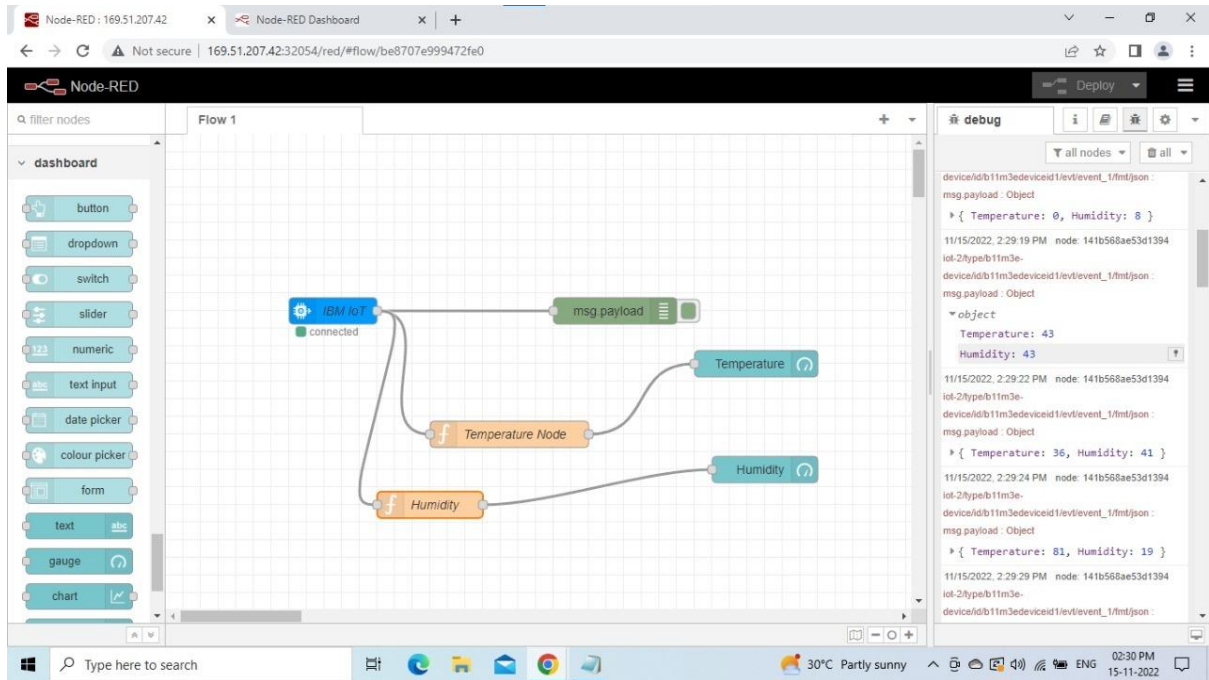
Step3: Then to display the value of temperature in Web interface make the connections in the flow as shown below



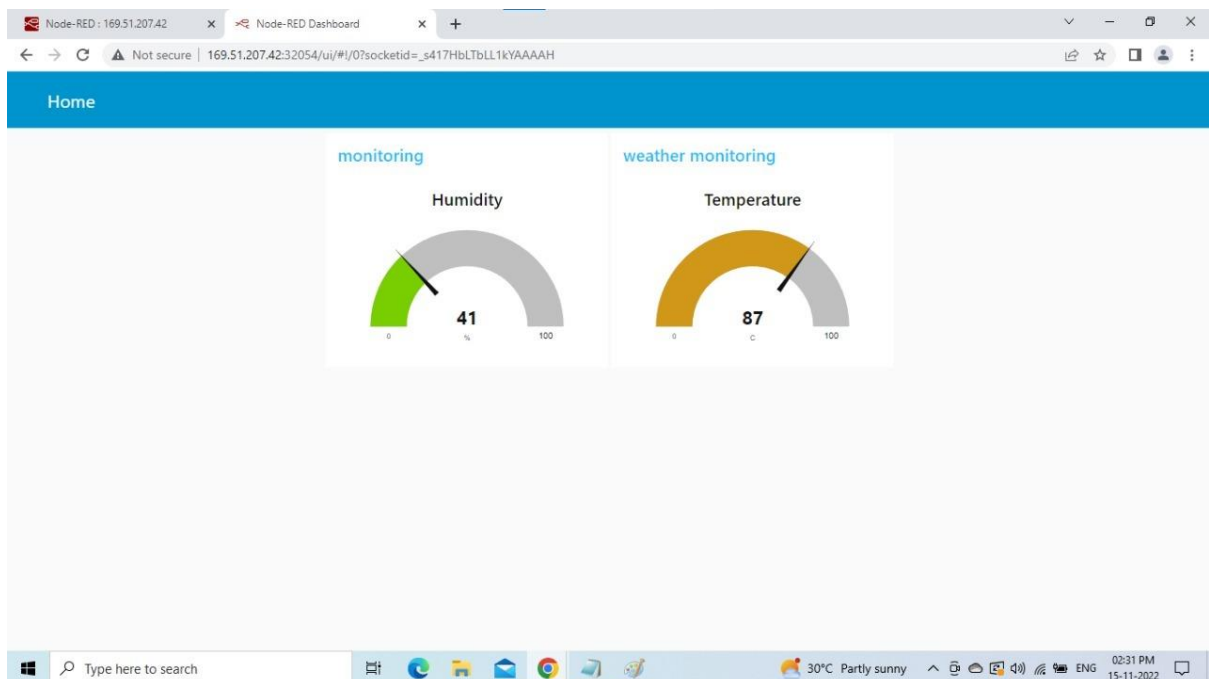
OUTPUT



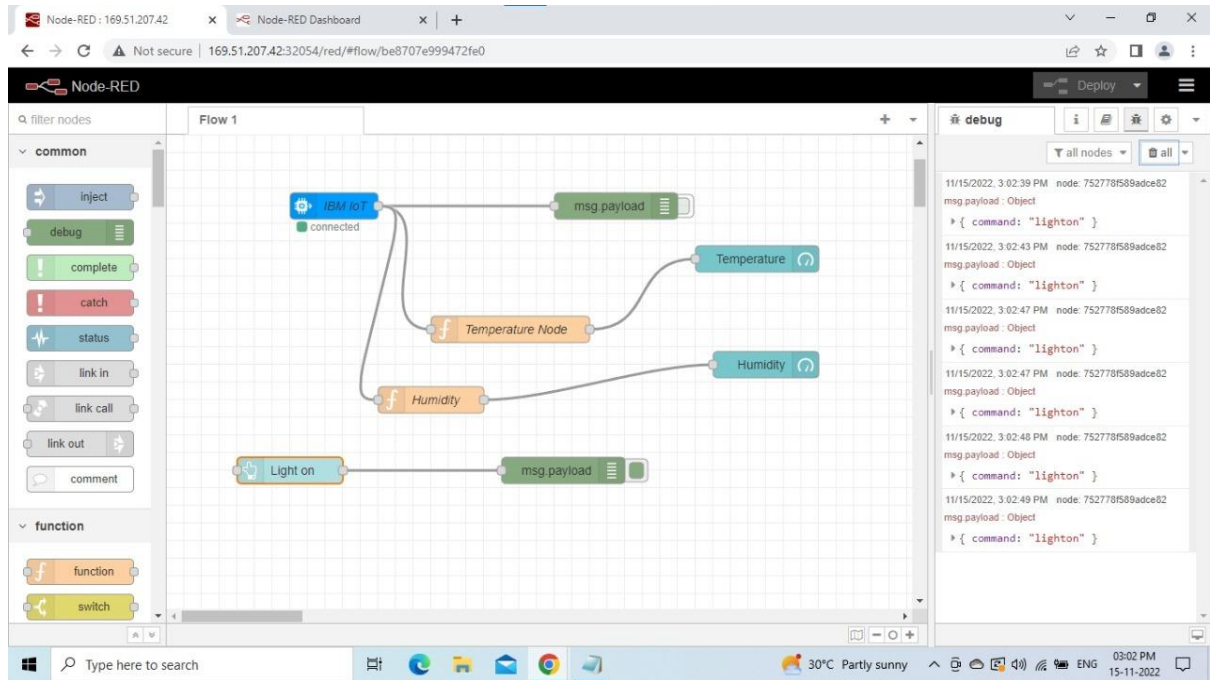
Step4: To display the value of temperature and humidity in Web interface make the connections in the flow as shown below



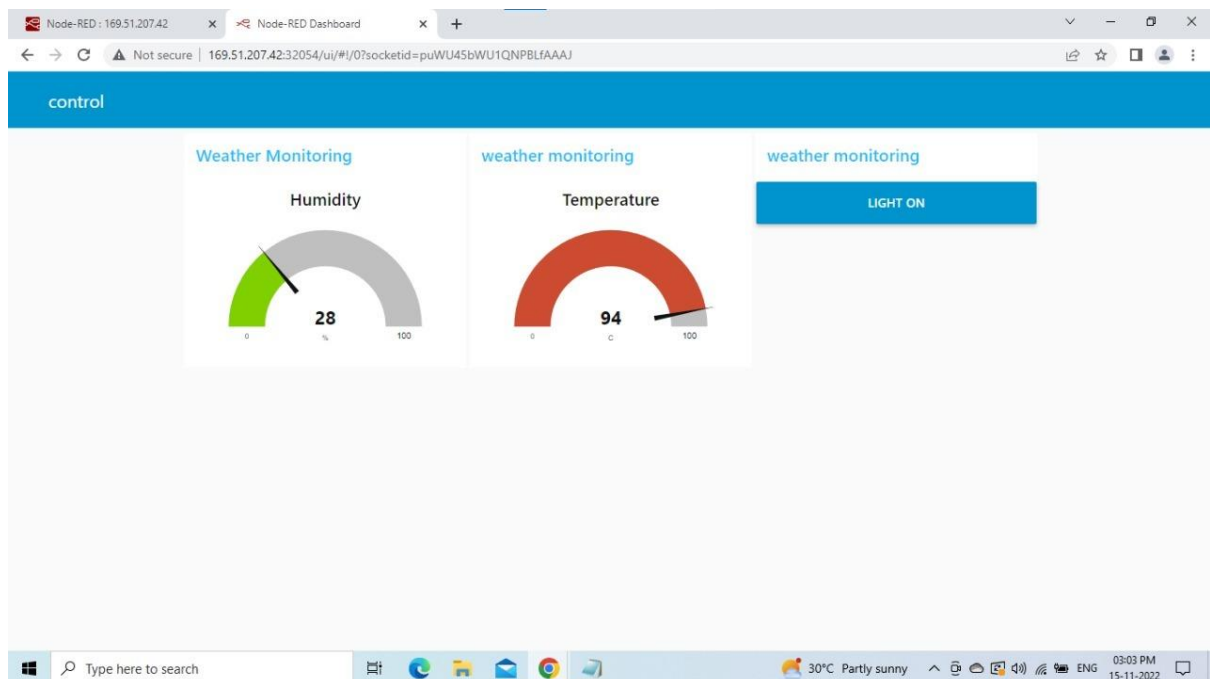
OUTPUT



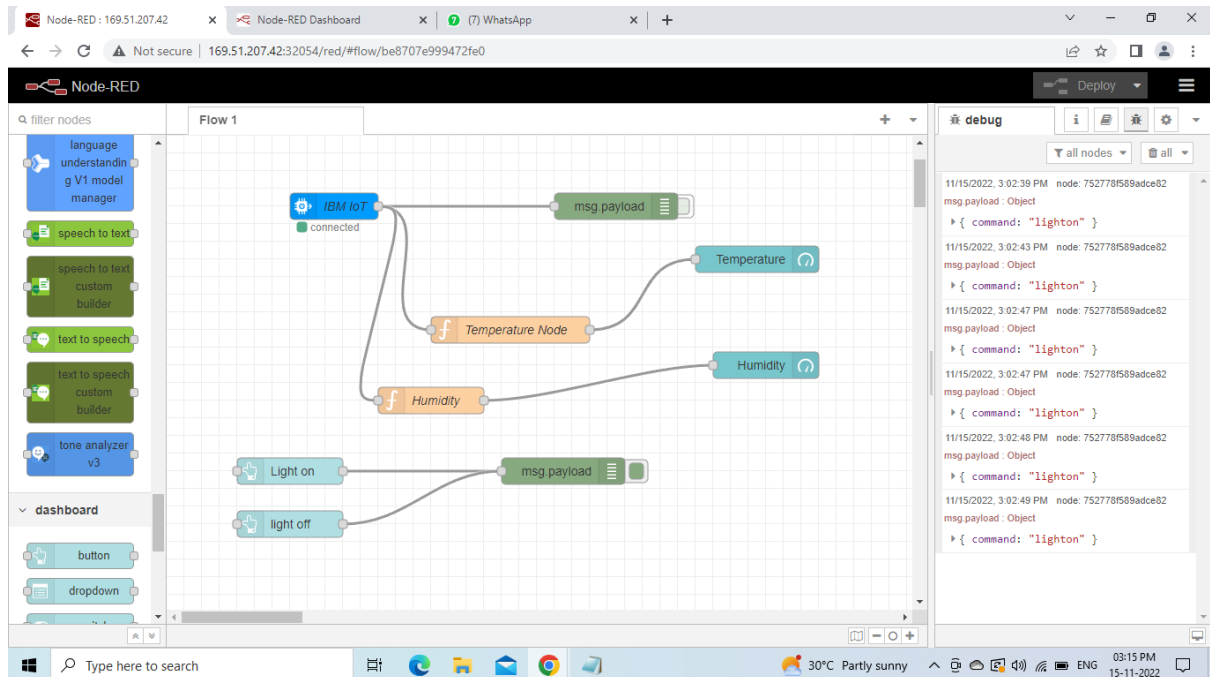
Step5: Then to display the value of temperature and humidity together with light ON in Web interface make the connections in the flow as shown below



OUTPUT



Step6: Then to display the value of temperature and humidity together with light ON or OFF in Web interface make the connections in the flow as shown below



OUTPUT

