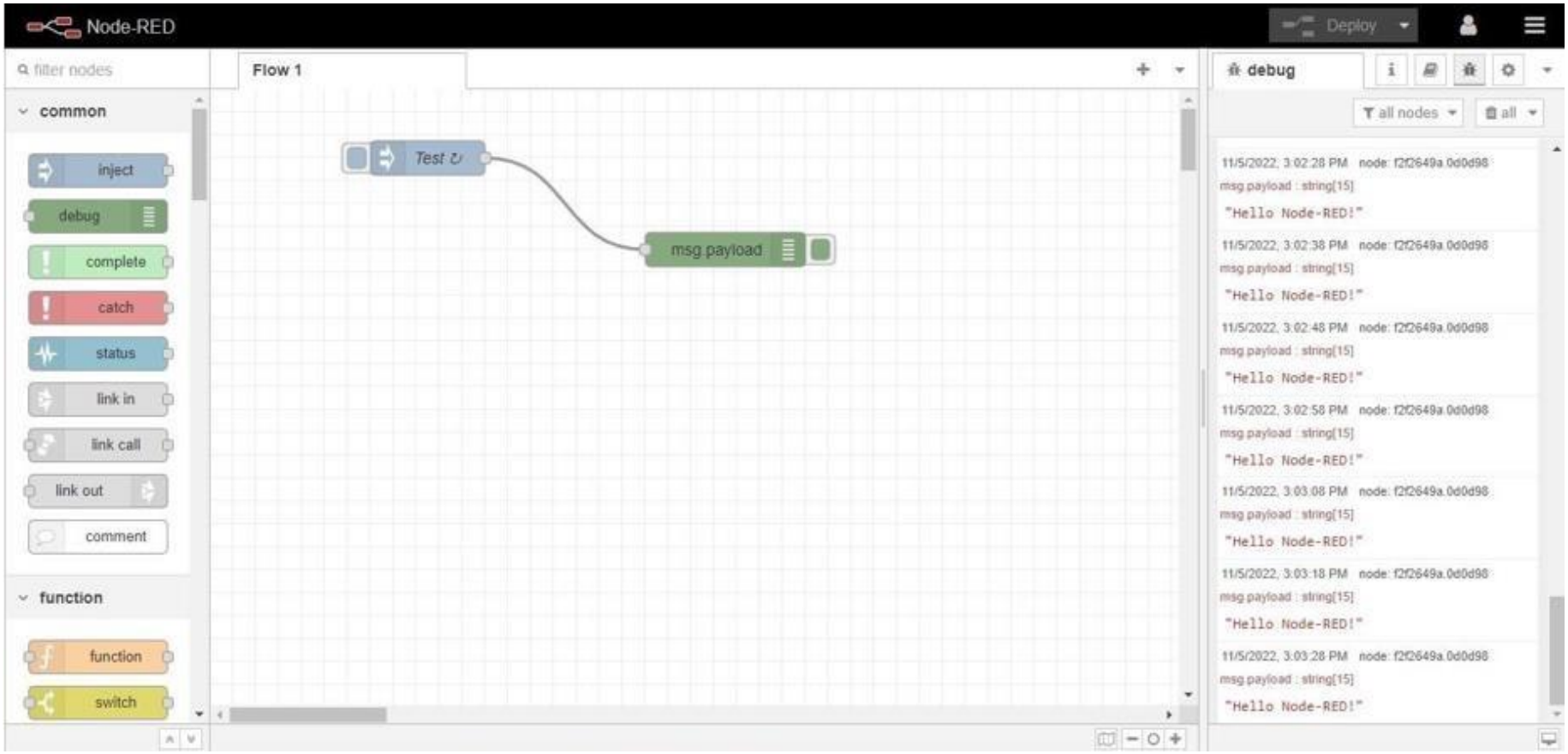
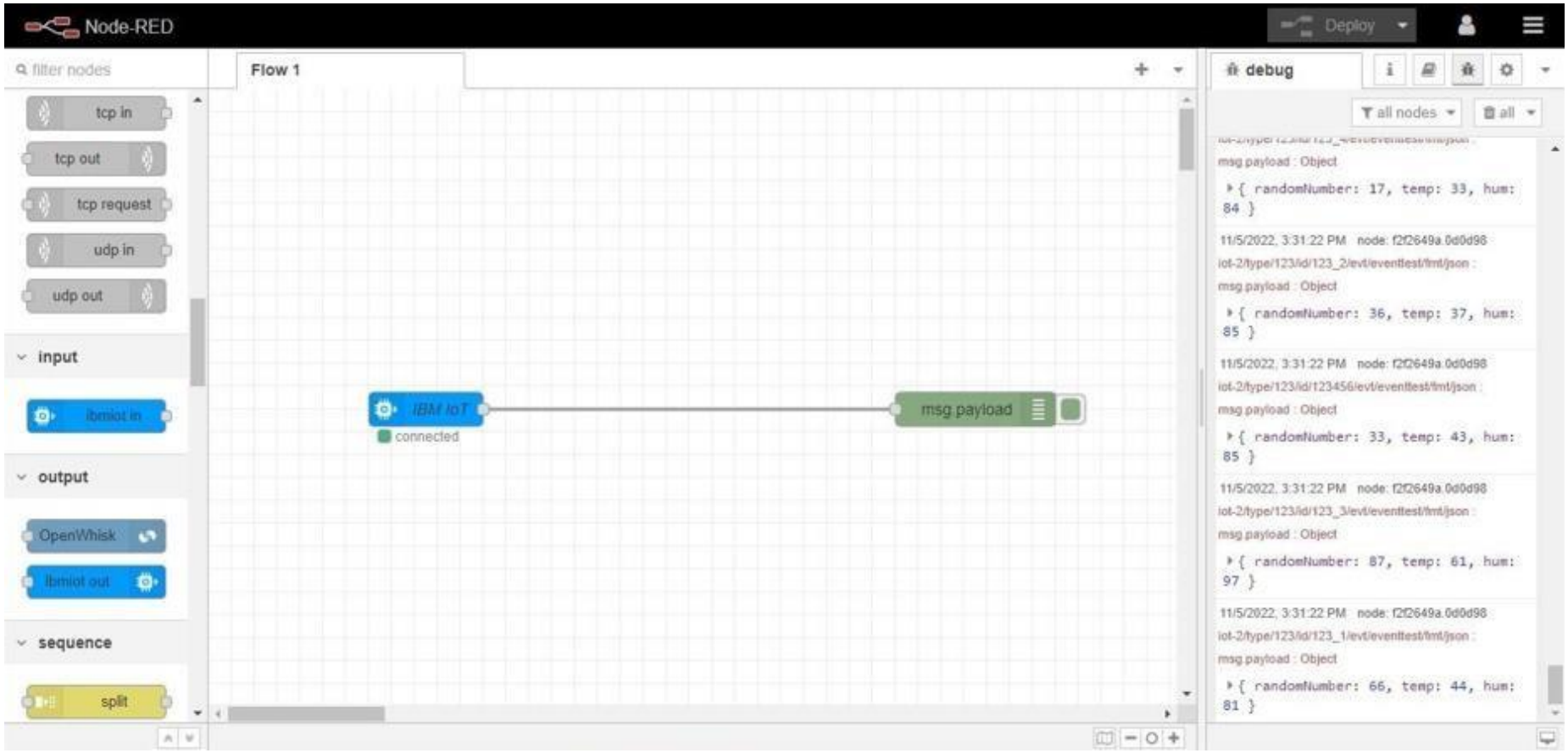
DEVELOP THE WEB APPLICATION USING NODE-RED SERVICE

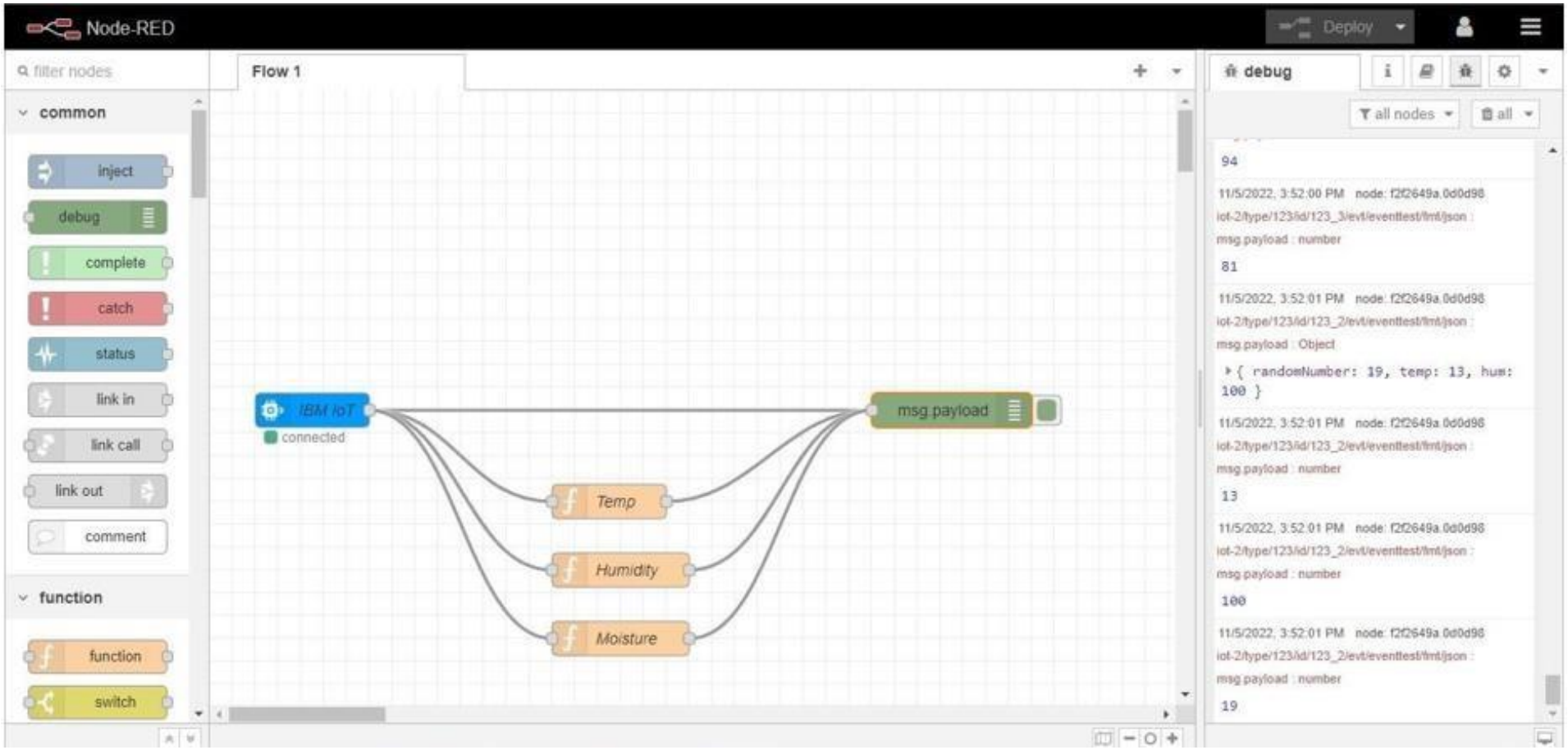
Date	12 November 2022
Team ID	PNT2022TMID05224
Project Name	Smart waste management system for metropolitan cities
Maximum Marks	8 Marks

* **Node-RED** is a flow-based development tool for visual programming developed originally by IBM for wiring together hardware devices, APIs and online services as part of the Internet of Things.

Node-RED provides a web browser-based flow editor, which can be used to create JavaScript functions. Elements of applications can be saved or shared for re-use. The runtime is built on Node.js. The flows created in Node-RED are stored using JSON. Since version 0.14, MQTT nodes can make properly configured TLS connections.


Node-RED
Deploy
filter nodes
Flow 1
debug
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
Test
msg payload
all nodes
all
11/5/2022, 3:02:28 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"
11/5/2022, 3:02:38 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"
11/5/2022, 3:02:48 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"
11/5/2022, 3:02:58 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"
11/5/2022, 3:03:08 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"
11/5/2022, 3:03:18 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"
11/5/2022, 3:03:28 PM node: f2f2649a.0d0d98
msg.payload : string[15]
"Hello Node-RED!"


Node-RED
Deploy
filter nodes
Flow 1
debug
tcp in
tcp out
tcp request
udp in
udp out
input
ibmiot in
output
OpenWhisk
ibmiot out
sequence
split
IBM IoT
connected
msg payload
all nodes
all
msg payload : Object
{ randomNumber: 17, temp: 33, hum: 84 }
11/5/2022, 3:31:22 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_2/evt/eventtest/fmt/json :
msg payload : Object
{ randomNumber: 36, temp: 37, hum: 85 }
11/5/2022, 3:31:22 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123456/evt/eventtest/fmt/json :
msg payload : Object
{ randomNumber: 33, temp: 43, hum: 85 }
11/5/2022, 3:31:22 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_3/evt/eventtest/fmt/json :
msg payload : Object
{ randomNumber: 87, temp: 61, hum: 97 }
11/5/2022, 3:31:22 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_1/evt/eventtest/fmt/json :
msg payload : Object
{ randomNumber: 66, temp: 44, hum: 81 }


Node-RED
Deploy
filter nodes
Flow 1
debug
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
IBM IoT
connected
Temp
Humidity
Moisture
msg payload
all nodes
all
94
11/5/2022, 3:52:00 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_3/evt/eventtest/fmt/json :
msg.payload : number
81
11/5/2022, 3:52:01 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_2/evt/eventtest/fmt/json :
msg.payload : Object
{ randomNumber: 19, temp: 13, hum: 100 }
11/5/2022, 3:52:01 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_2/evt/eventtest/fmt/json :
msg.payload : number
13
11/5/2022, 3:52:01 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_2/evt/eventtest/fmt/json :
msg.payload : number
100
11/5/2022, 3:52:01 PM node: f2f2649a.0d0d98
iot-2/type/123/id/123_2/evt/eventtest/fmt/json :
msg.payload : number
19