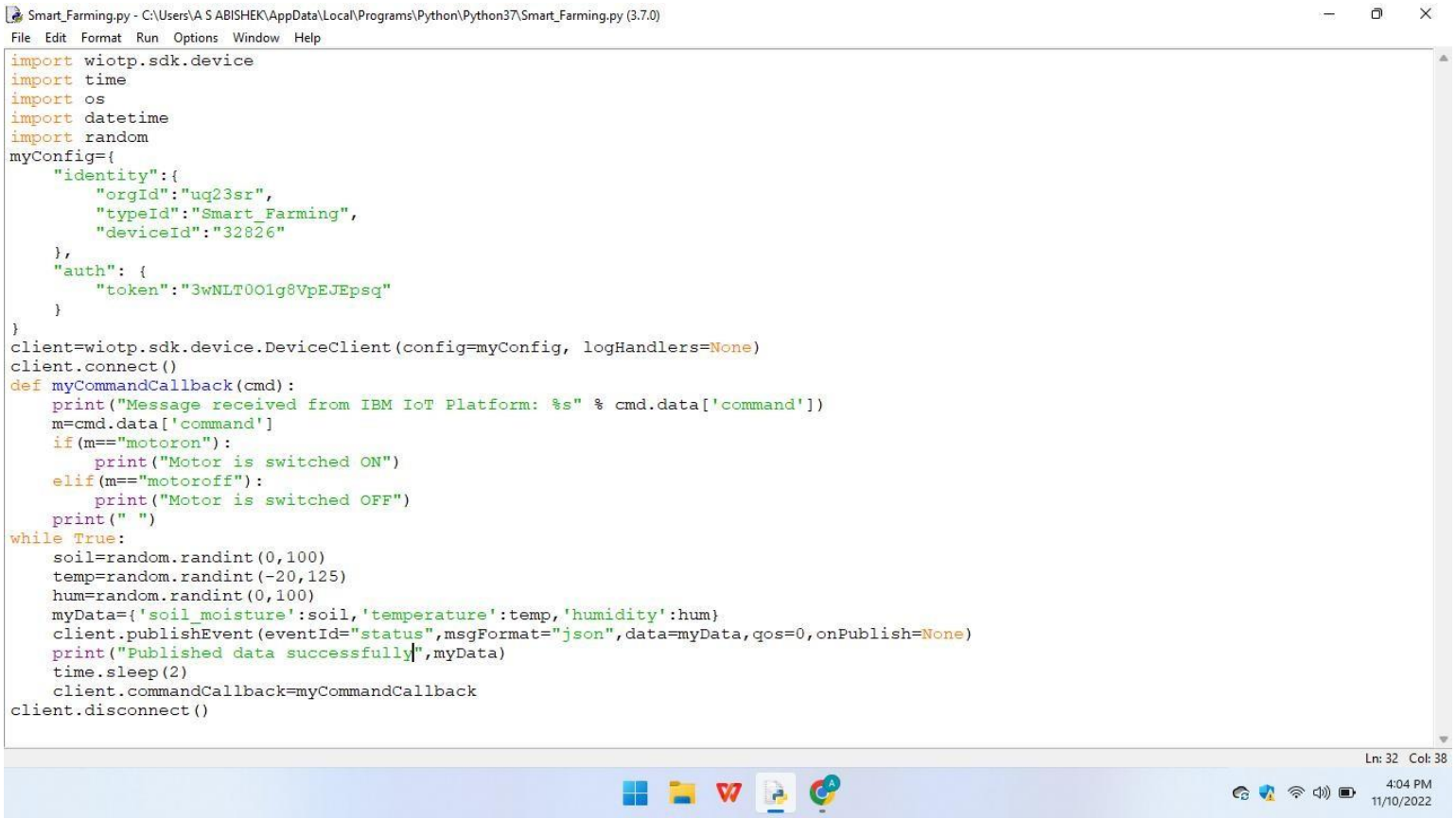
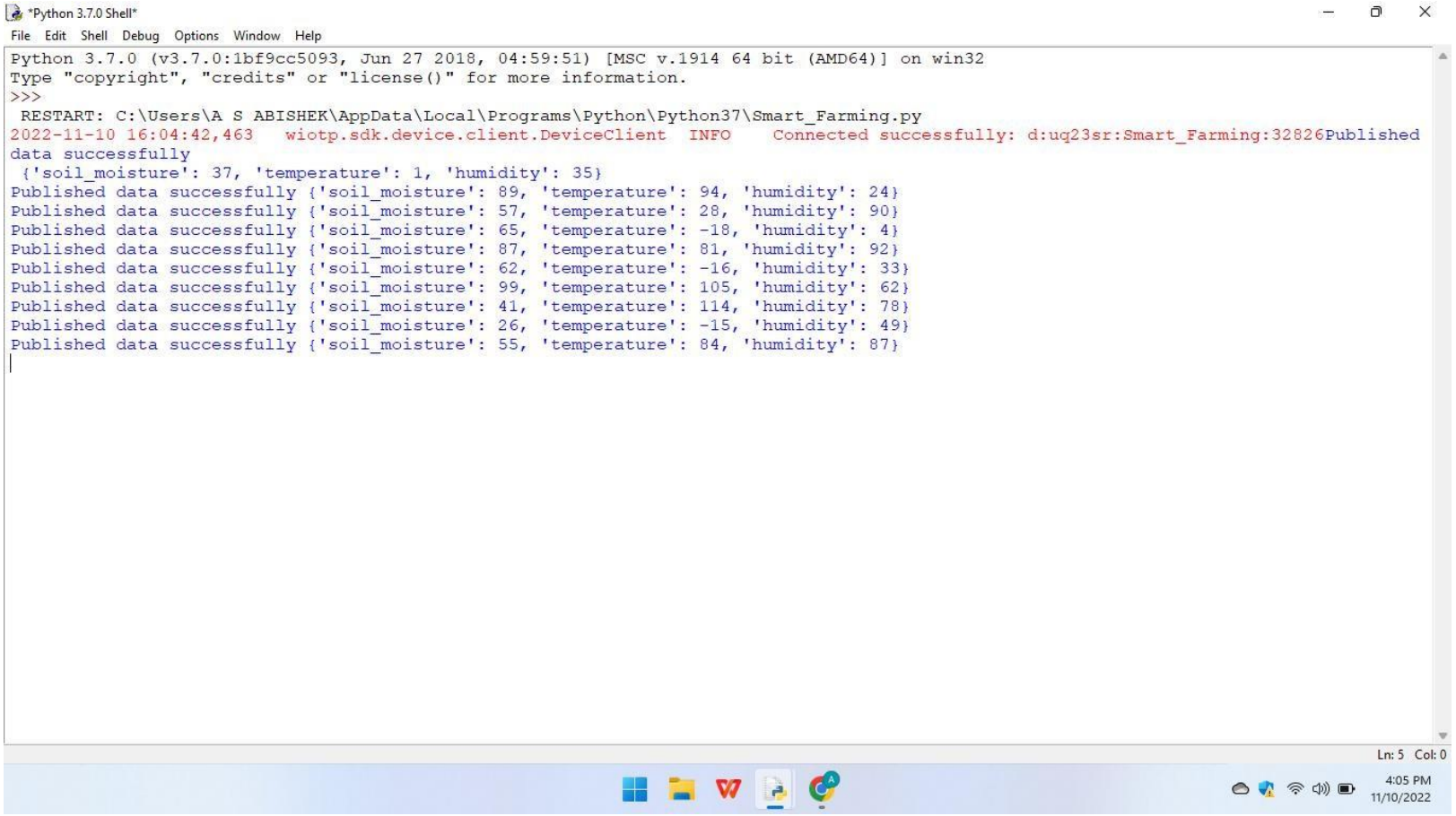
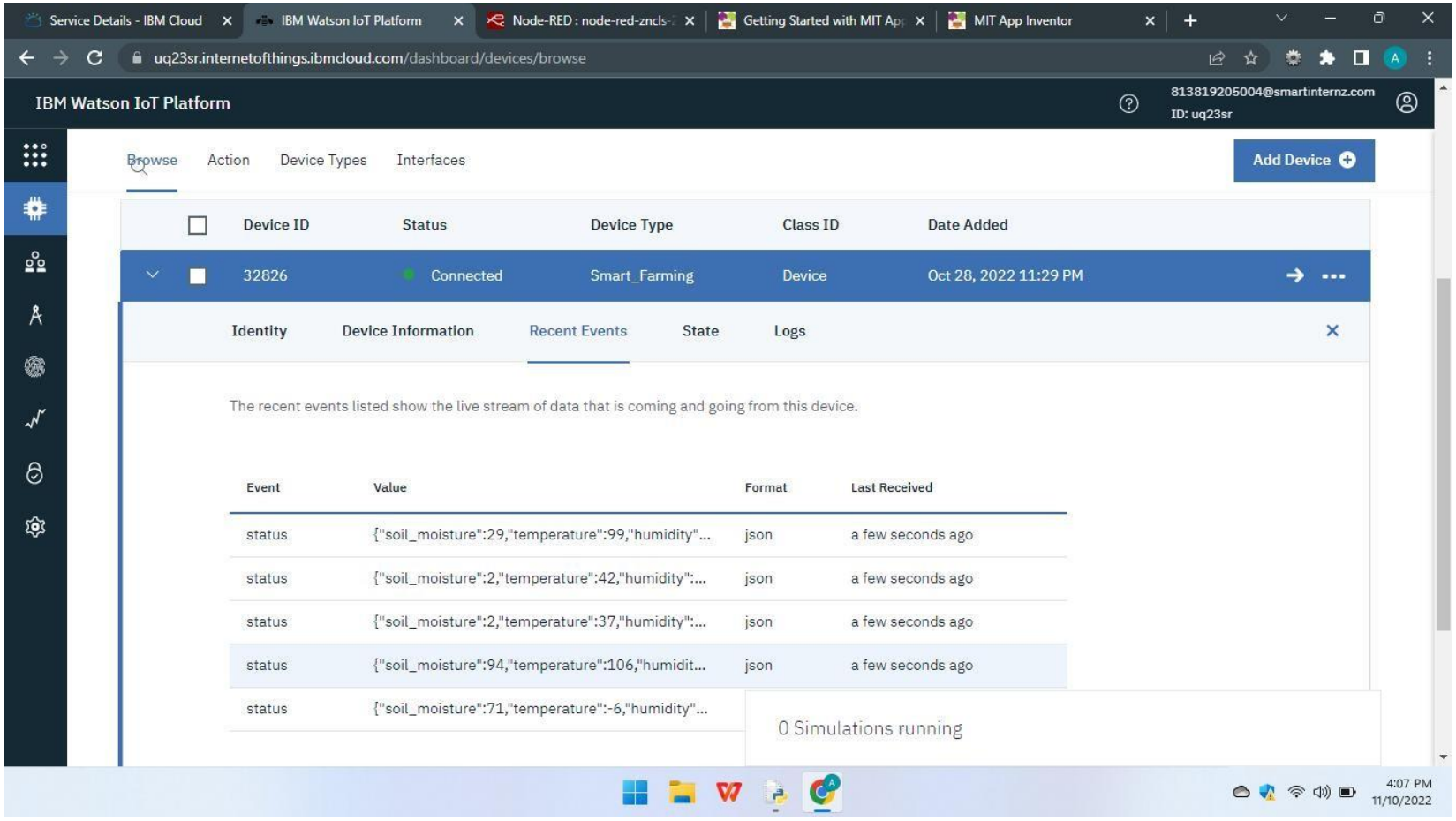
PROJECT DEVELOPMENT PHASE

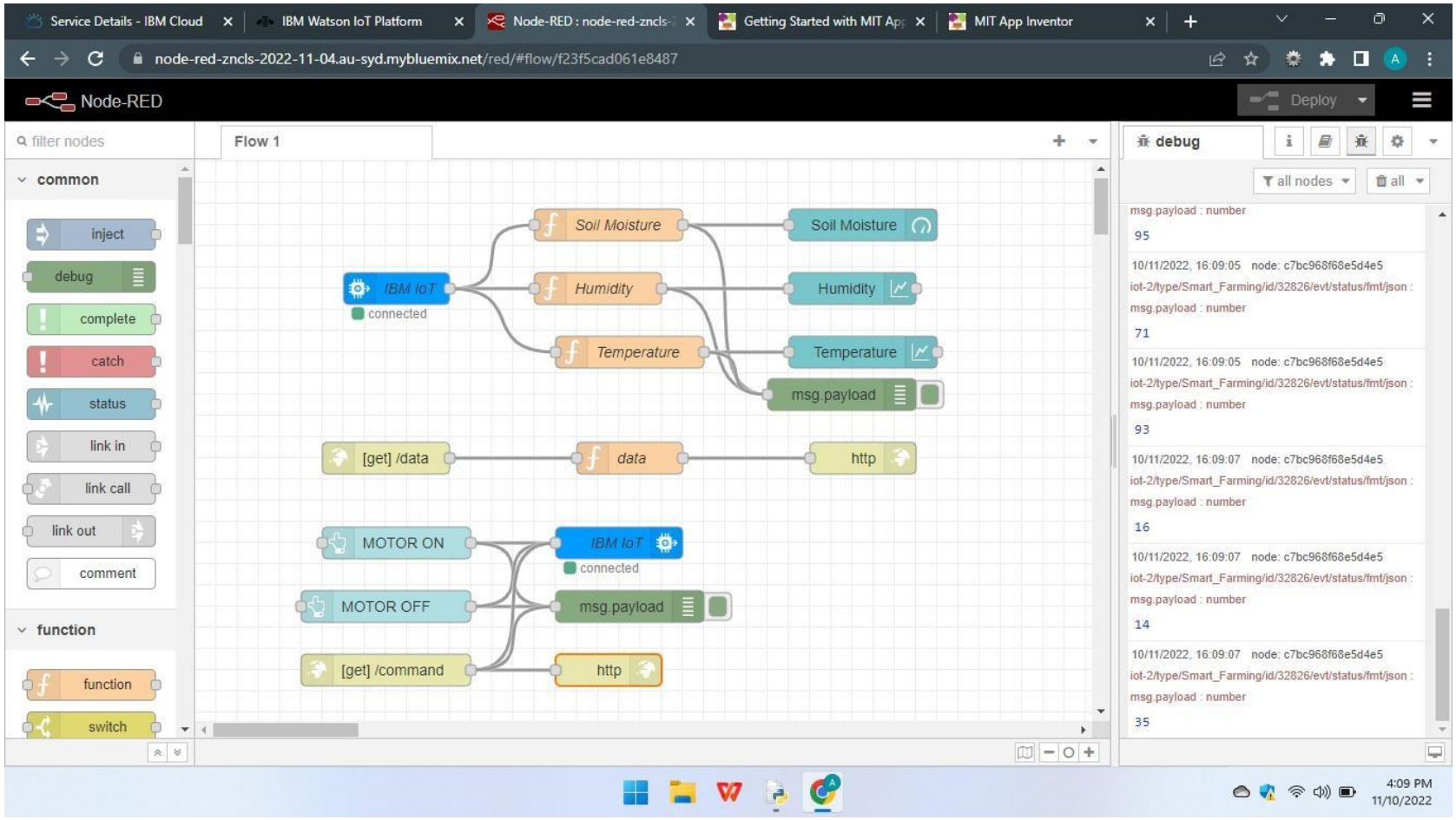
Delivery of Sprint - 3

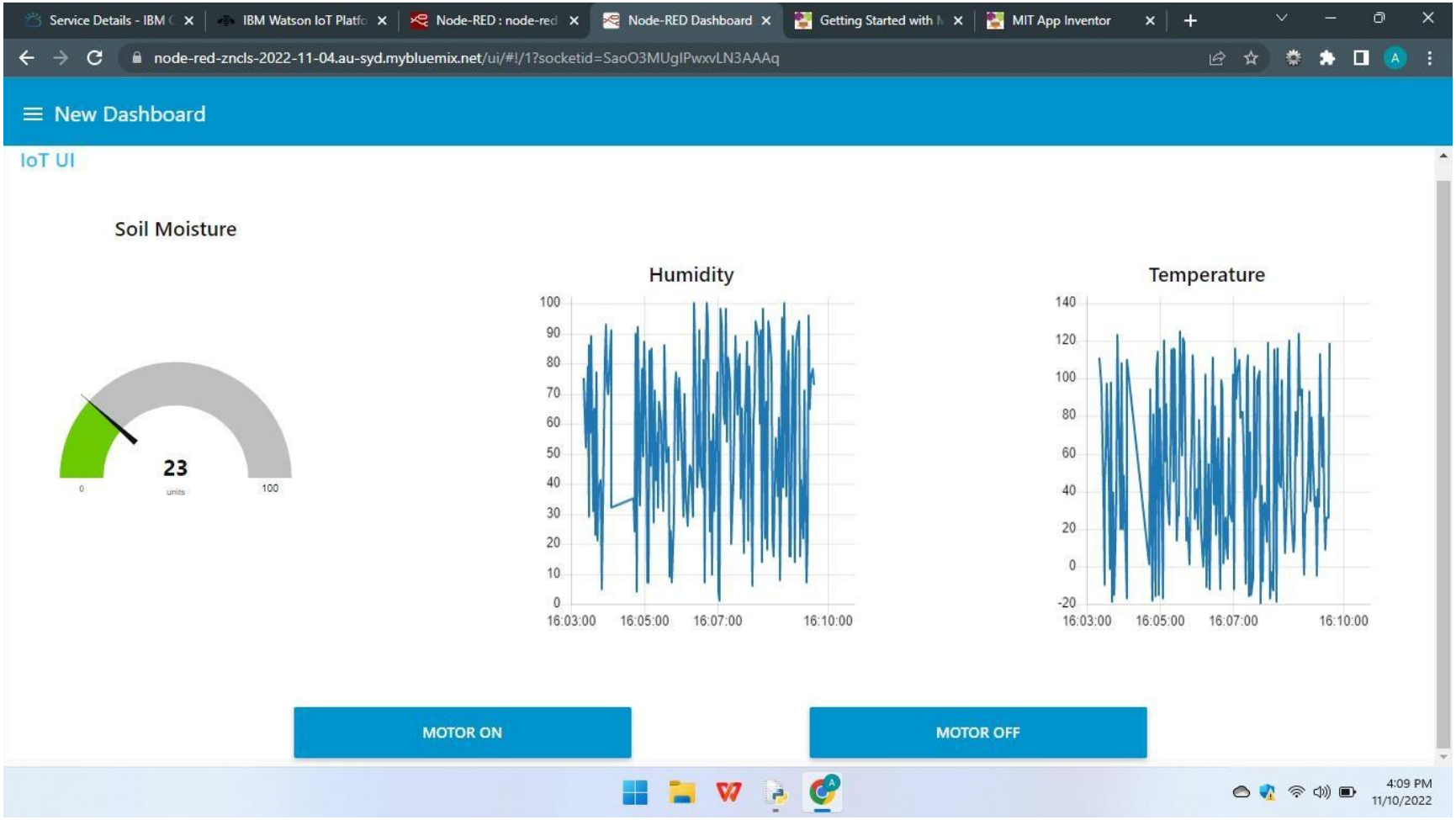
Date	10 November 2022
Team ID	PNT2022TMID16740
Project Name	Smart farmer - IoT Enabled Smart Farming Application



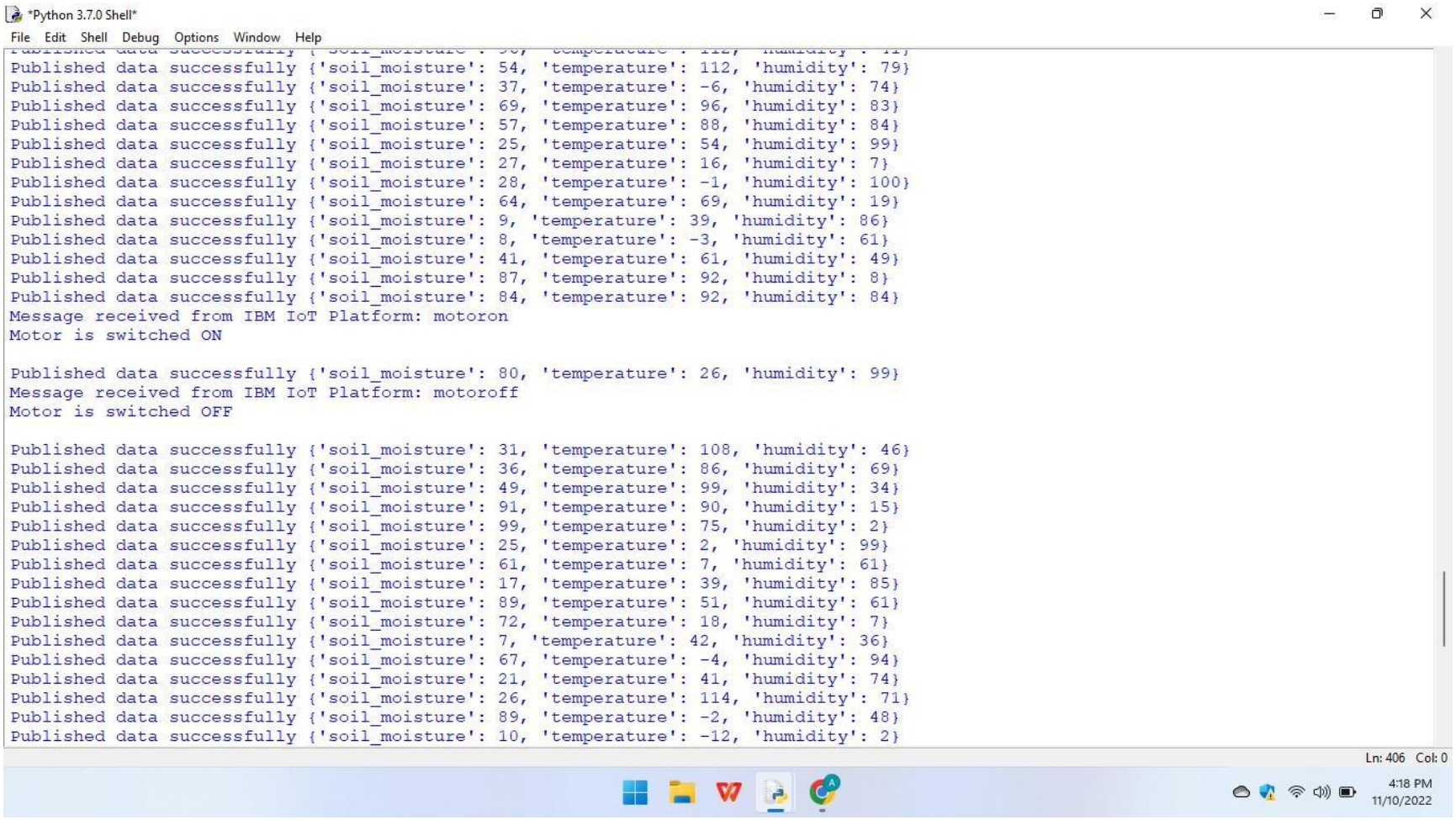

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\A S ABISHEK\AppData\Local\Programs\Python\Python37\Smart_Farming.py
2022-11-10 16:04:42,463 wiotp.sdk.device.client.DeviceClient INFO Connected successfully: d:uq23sr:Smart_Farming:32826Published data successfully
{'soil_moisture': 37, 'temperature': 1, 'humidity': 35}
Published data successfully {'soil_moisture': 89, 'temperature': 94, 'humidity': 24}
Published data successfully {'soil_moisture': 57, 'temperature': 28, 'humidity': 90}
Published data successfully {'soil_moisture': 65, 'temperature': -18, 'humidity': 4}
Published data successfully {'soil_moisture': 87, 'temperature': 81, 'humidity': 92}
Published data successfully {'soil_moisture': 62, 'temperature': -16, 'humidity': 33}
Published data successfully {'soil_moisture': 99, 'temperature': 105, 'humidity': 62}
Published data successfully {'soil_moisture': 41, 'temperature': 114, 'humidity': 78}
Published data successfully {'soil_moisture': 26, 'temperature': -15, 'humidity': 49}
Published data successfully {'soil_moisture': 55, 'temperature': 84, 'humidity': 87}
Ln: 5 Col: 0
4:05 PM
11/10/2022

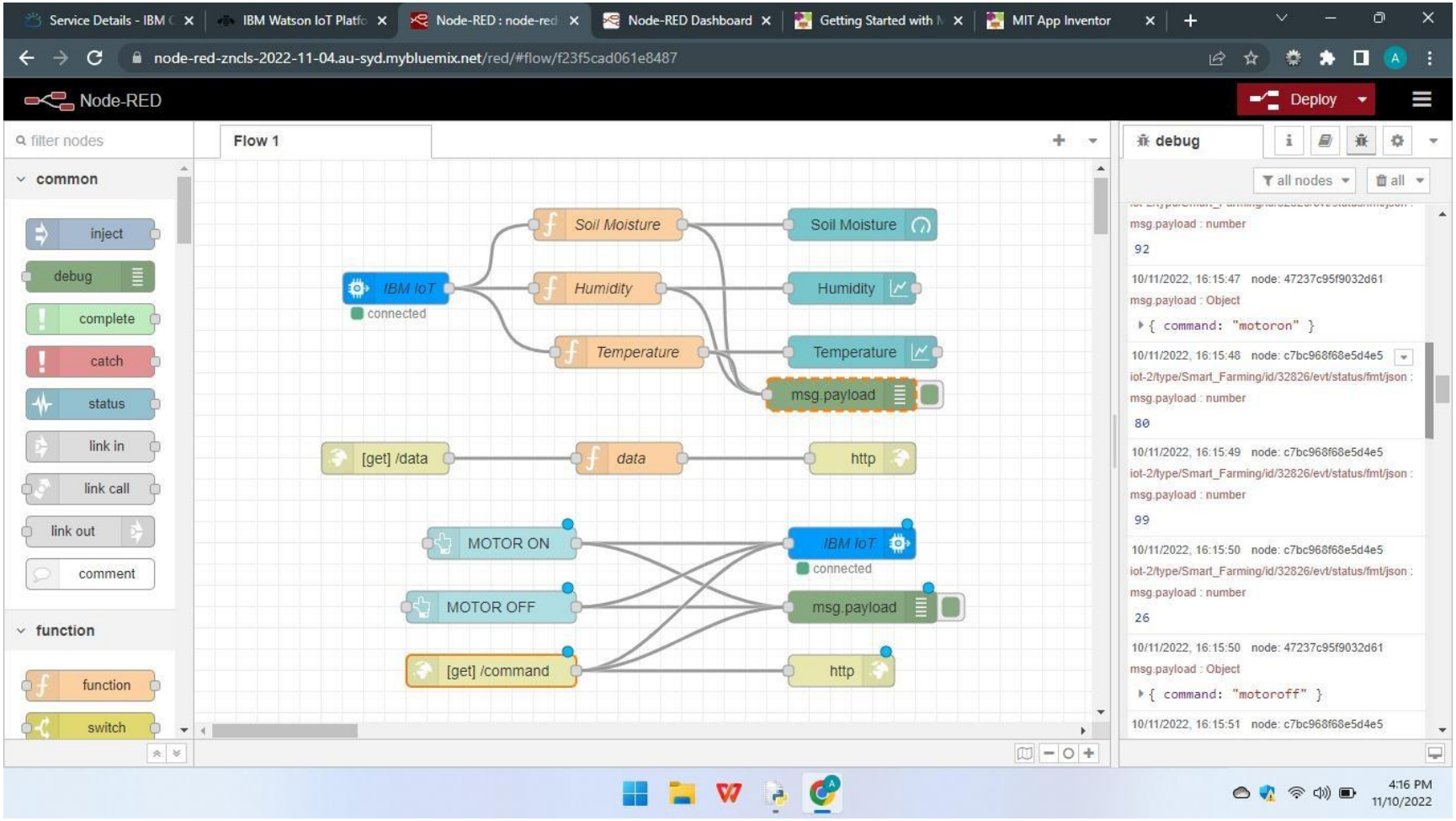

Service Details - IBM Cloud
IBM Watson IoT Platform
Node-RED : node-red-zncls-
Getting Started with MIT Ap
MIT App Inventor
uq23sr.internetofthings.ibmcloud.com/dashboard/devices/browse
IBM Watson IoT Platform
813819205004@smartinternz.com
ID: uq23sr
Browse
Action
Device Types
Interfaces
Add Device
Device ID
Status
Device Type
Class ID
Date Added
32826
Connected
Smart_Farming
Device
Oct 28, 2022 11:29 PM
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
status
{"soil_moisture":29,"temperature":99,"humidity"...
json
a few seconds ago
status
{"soil_moisture":2,"temperature":42,"humidity":...
json
a few seconds ago
status
{"soil_moisture":2,"temperature":37,"humidity":...
json
a few seconds ago
status
{"soil_moisture":94,"temperature":106,"humidit...
json
a few seconds ago
status
{"soil_moisture":71,"temperature":-6,"humidity"...
0 Simulations running
4:07 PM
11/10/2022


Service Details - IBM Cloud
IBM Watson IoT Platform
Node-RED : node-red-zncls-
Getting Started with MIT Ap
MIT App Inventor
node-red-zncls-2022-11-04.au-syd.mybluemix.net/red/#flow/f23f5cad061e8487
Node-RED
Deploy
filter nodes
Flow 1
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
Soil Moisture
Soil Moisture
IBM IoT
connected
Humidity
Humidity
Temperature
Temperature
msg.payload
[get] /data
data
http
MOTOR ON
IBM IoT
connected
MOTOR OFF
msg.payload
[get] /command
http
debug
all nodes
all
msg.payload : number
95
10/11/2022, 16:09:05 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
71
10/11/2022, 16:09:05 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
93
10/11/2022, 16:09:07 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
16
10/11/2022, 16:09:07 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
14
10/11/2022, 16:09:07 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
35
4:09 PM
11/10/2022


Service Details - IBM
IBM Watson IoT Platfo
Node-RED : node-red
Node-RED Dashboard
Getting Started with
MIT App Inventor
node-red-zncls-2022-11-04.au-syd.mybluemix.net/ui/#!/1?socketid=SaoO3MUgIPwxvLN3AAAq
New Dashboard
IoT UI
Soil Moisture
23
0
units
100
Humidity
100
90
80
70
60
50
40
30
20
10
0
16:03:00
16:05:00
16:07:00
16:10:00
Temperature
140
120
100
80
60
40
20
0
-20
16:03:00
16:05:00
16:07:00
16:10:00
MOTOR ON
MOTOR OFF
4:09 PM
11/10/2022

After receiving MOTOR ON and MOTOR OFF command from the Web UI:




Service Details - IBM
IBM Watson IoT Platfo
Node-RED : node-red
Node-RED Dashboard
Getting Started with
MIT App Inventor
node-red-zncls-2022-11-04.au-syd.mybluemix.net/red/#flow/f23f5cad061e8487
Node-RED
Deploy
filter nodes
Flow 1
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
Soil Moisture
Soil Moisture
IBM IoT
connected
Humidity
Humidity
Temperature
Temperature
msg.payload
[get] /data
data
http
MOTOR ON
IBM IoT
connected
MOTOR OFF
msg.payload
[get] /command
http
debug
all nodes
all
msg.payload : number
92
10/11/2022, 16:15:47 node: 47237c95f9032d61
msg.payload : Object
{ command: "motoron" }
10/11/2022, 16:15:48 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
80
10/11/2022, 16:15:49 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
99
10/11/2022, 16:15:50 node: c7bc968f68e5d4e5
iot-2/type/Smart_Farming/id/32826/evt/status/fmt/json :
msg.payload : number
26
10/11/2022, 16:15:50 node: 47237c95f9032d61
msg.payload : Object
{ command: "motoroff" }
10/11/2022, 16:15:51 node: c7bc968f68e5d4e5
4:16 PM
11/10/2022