

# IOT ASSIGNMENT-3

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## CODE:

```
import
wiotp.sdk.device

import time import
random myConfig = {
    "identity":{
        "orgId":"g3kuc1",
        "typeId":
        "varshit",
        "deviceId":"7119
    "
    },
    "auth":{
        "token":"varshit719"
    }
}

def myCommandCallback(cmd):

    print("Message received from IBM IoT Platform:%s"%cmd.data['command'])
```

```
m=cmd.data['command']
```

```
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)  
client.connect()
```

```
while True:
```

```
    wl=random.randint(0,100)
```

```
    li=random.randint(0,300)
```

```
    myData={'waterlevel':wl, 'lightintensity':li}
```

```
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)

print("Published data Successfully:%s",myData) client.commandCallback =
myCommandCallback

time.sleep(2)

client.disconnect()
```

## OUTPUT:

The image displays the Node-RED web interface. The main workspace shows a flow diagram with the following components:

- Input:** A `button` node.
- Processing:** Two `waterlevel` and `lightintensity` nodes (represented by sliders) that receive data from the button.
- Output:** A `msg.payload` node that receives data from the processing nodes.

The right sidebar shows the `debug` console with the following log entries:

```
7/18/2021, 11:30:06 PM node: a5470643 a96208  
iot-2hype/vtapi/d7911ev/status/rm/json: msg.payload  
: number  
36  
7/18/2021, 11:30:08 PM node: a5470643 a96208  
iot-2hype/vtapi/d7911ev/status/rm/json: msg.payload  
: Object  
297  
{ waterlevel: 58, lightintensity:  
131 }  
7/18/2021, 11:30:08 PM node: a5470643 a96208  
iot-2hype/vtapi/d7911ev/status/rm/json: msg.payload  
: number  
58  
7/18/2021, 11:30:08 PM node: a5470643 a96208  
iot-2hype/vtapi/d7911ev/status/rm/json: msg.payload  
: number  
131  
7/18/2021, 11:30:10 PM node: a5470643 a96208  
iot-2hype/vtapi/d7911ev/status/rm/json: msg.payload  
: Object  
{ waterlevel: 97, lightintensity:  
145 }  
7/18/2021, 11:30:11 PM node: a5470643 a96208  
iot-2hype/vtapi/d7911ev/status/rm/json: msg.payload  
: number
```

The bottom terminal window shows the following output:

```
Published data Successfully: %s {'waterlevel': 49, 'lightintensity': 299}  
Published data Successfully: %s {'waterlevel': 20, 'lightintensity': 276}  
Published data Successfully: %s {'waterlevel': 65, 'lightintensity': 136}  
Published data Successfully: %s {'waterlevel': 38, 'lightintensity': 209}  
Published data Successfully: %s {'waterlevel': 82, 'lightintensity': 85}  
Published data Successfully: %s {'waterlevel': 2, 'lightintensity': 172}  
Published data Successfully: %s {'waterlevel': 62, 'lightintensity': 175}  
Published data Successfully: %s {'waterlevel': 71, 'lightintensity': 204}  
Published data Successfully: %s {'waterlevel': 50, 'lightintensity': 58}  
Published data Successfully: %s {'waterlevel': 66, 'lightintensity': 90}  
Published data Successfully: %s {'waterlevel': 95, 'lightintensity': 231}  
Published data Successfully: %s {'waterlevel': 7, 'lightintensity': 262}  
Published data Successfully: %s {'waterlevel': 11, 'lightintensity': 247}  
Published data Successfully: %s {'waterlevel': 24, 'lightintensity': 236}  
Published data Successfully: %s {'waterlevel': 42, 'lightintensity': 70}  
Published data Successfully: %s {'waterlevel': 0, 'lightintensity': 227}  
Published data Successfully: %s {'waterlevel': 61, 'lightintensity': 228}  
Published data Successfully: %s {'waterlevel': 62, 'lightintensity': 112}  
Published data Successfully: %s {'waterlevel': 3, 'lightintensity': 133}  
Published data Successfully: %s {'waterlevel': 54, 'lightintensity': 144}  
Published data Successfully: %s {'waterlevel': 10, 'lightintensity': 154}  
Published data Successfully: %s {'waterlevel': 44, 'lightintensity': 267}  
Published data Successfully: %s {'waterlevel': 14, 'lightintensity': 59}  
Published data Successfully: %s {'waterlevel': 65, 'lightintensity': 214}  
Published data Successfully: %s {'waterlevel': 60, 'lightintensity': 291}  
Published data Successfully: %s {'waterlevel': 99, 'lightintensity': 80}  
Published data Successfully: %s {'waterlevel': 0, 'lightintensity': 31}  
Published data Successfully: %s {'waterlevel': 6, 'lightintensity': 146}  
Published data Successfully: %s {'waterlevel': 83, 'lightintensity': 285}  
Published data Successfully: %s {'waterlevel': 87, 'lightintensity': 269}  
Published data Successfully: %s {'waterlevel': 33, 'lightintensity': 10}  
Published data Successfully: %s {'waterlevel': 58, 'lightintensity': 129}  
Published data Successfully: %s {'waterlevel': 6, 'lightintensity': 98}  
Published data Successfully: %s {'waterlevel': 98, 'lightintensity': 136}
```

Ln: 5 Col: 0

