

ASSESSMENT – 3

NAME:N.VARUN KRISHNA

ROLL.NO:19BEC0273

PYTHON CODE:

```
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "41458d",
        "typeId": "Krishna0607",
        "deviceId": "06072002"
    },
    "auth": {
        "token": "Krishna0607"
    }
}

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:
    water_level=random.randint(0,100)
    intensity=random.randint(0,100)
    myData={'water_level':water_level, 'intensity':intensity}
    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()
```

CODE:



The screenshot shows a code editor window titled "assesment3.py - C:\Users\varun.krishna\OneDrive\Desktop\DA'S&PROJECTS\assesment3.py (3.9.6)". The editor has a menu bar with "File", "Edit", "Format", "Run", "Options", "Window", and "Help". The code is a Python script that imports the "wiotp.sdk.device", "time", and "random" modules. It defines a "myConfig" dictionary with "identity" and "auth" sections. The "identity" section contains "orgId", "typeId", and "deviceId". The "auth" section contains a "token". A function "myCommandCallback" is defined, which prints a message and returns the command data. The script then creates a "DeviceClient" object, connects to the IoT platform, and enters a loop where it publishes random "water_level" and "intensity" data every 2 seconds. The status of the client is published as "status". The script ends with "client.disconnect()".

```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "41458d",
        "typeId": "Krishna0607",
        "deviceId": "06072002"
    },
    "auth": {
        "token": "Krishna0607"
    }
}

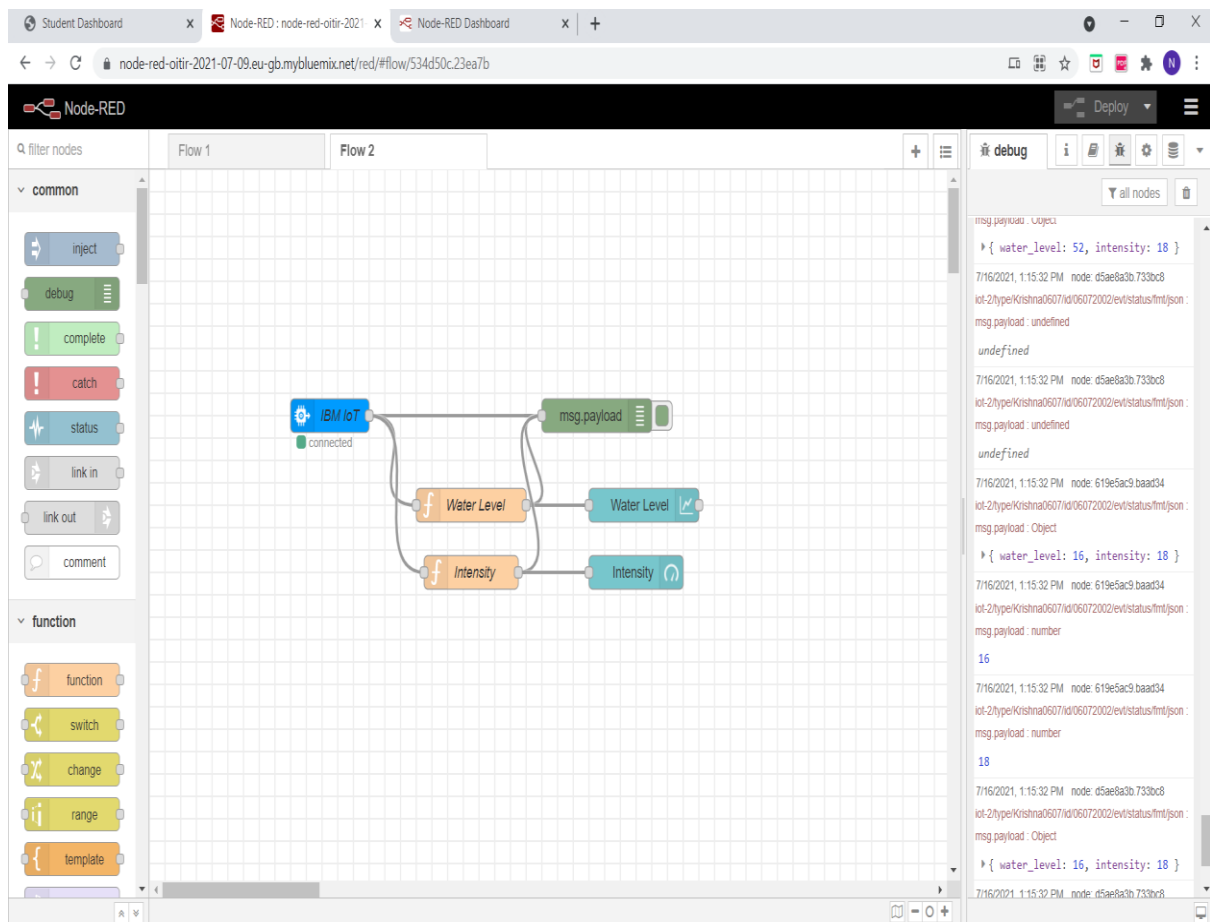
def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

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

while True:
    water_level=random.randint(0,100)
    intensity=random.randint(0,100)
    myData={'water_level':water_level, 'intensity':intensity}
    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()
```

Ln: 1 Col: 0

NODE-RED DESIGN:



WEB-DESIGN:

