VIT SMART BRIDGE IOT EXTERNSHIP PROGRAM

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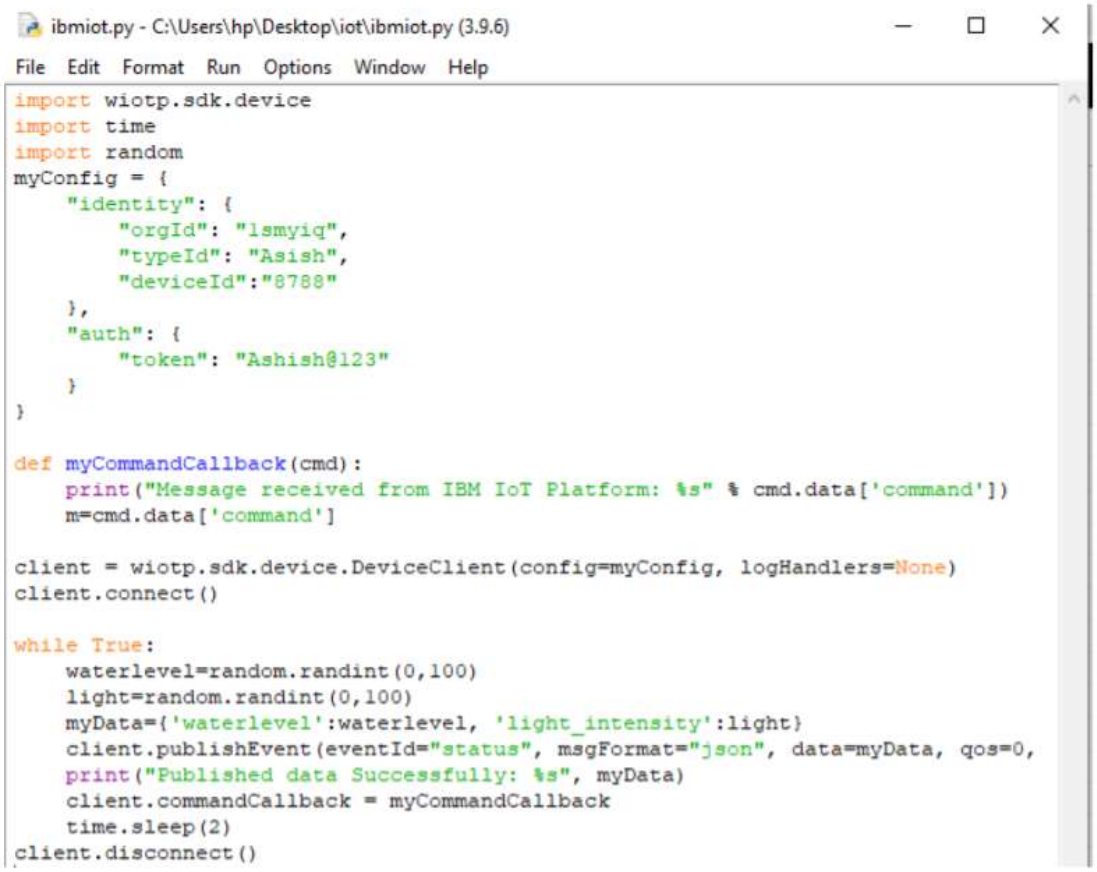
Assignment-3: Develop a code to upload the water tank level and light intensity values to the IBM IoT platform and visualize them in the web application.

Python code:

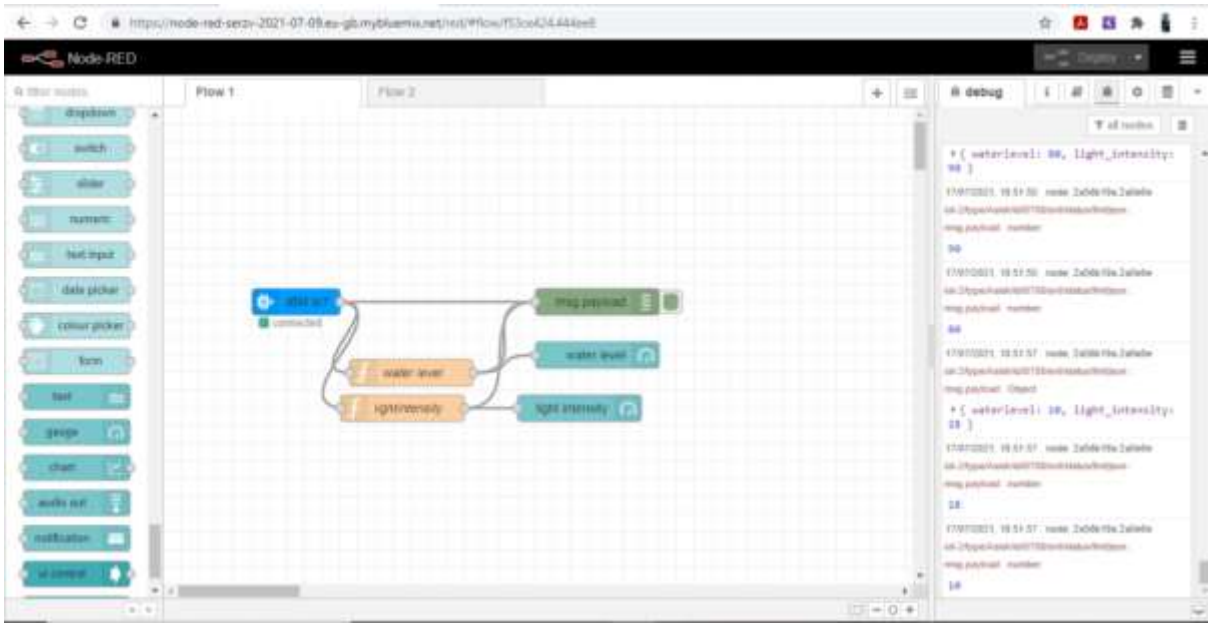



```
import wiotp.sdk.device
import time
import random
myConfig = {
    "identity": {
        "orgId": "lsmyiq",
        "typeId": "Asish",
        "deviceId":"8788"
    },
    "auth": {
        "token": "Ashish@123"
    }
}

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:
    waterlevel=random.randint(0,100)
    light=random.randint(0,100)
    myData={'waterlevel':waterlevel, 'light_intensity':light}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
client.disconnect()
```

Code:

```
import wiotp.sdk.device
```

```
import random
myConfig = {
   "identity": {
      "orgId": "1smyiq",
      "typeId": "Asish",
      "deviceId":"8788"
   },
   "auth": {
      "token": "Ashish@123"
   }
}
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:
   waterlevel=random.randint(0,100)
   light=random.randint(0,100)
   myData={'waterlevel':waterlevel, 'light_intensity':light}
   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()
```

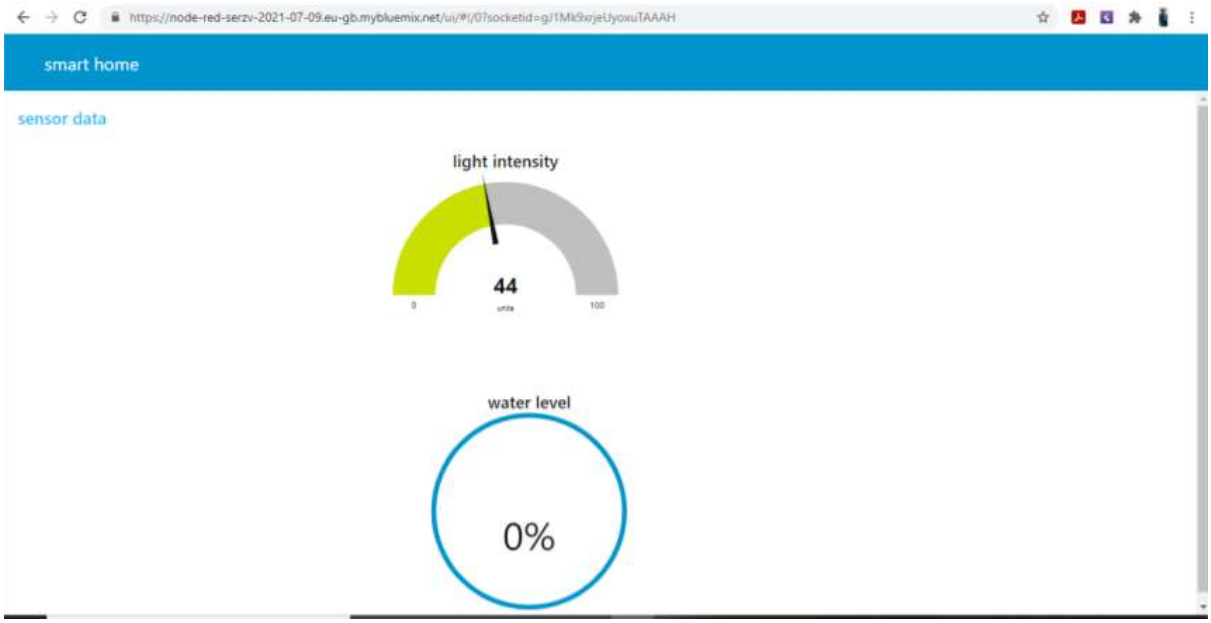


Output:

IDLE Shell 3.9.6

File Edit Shell Debug Options Window Help

```
Published data Successfully: %s {'waterlevel': 0, 'light_intensity': 44}
Published data Successfully: %s {'waterlevel': 12, 'light_intensity': 37}
Published data Successfully: %s {'waterlevel': 90, 'light_intensity': 41}
Published data Successfully: %s {'waterlevel': 85, 'light_intensity': 59}
Published data Successfully: %s {'waterlevel': 21, 'light_intensity': 48}
Published data Successfully: %s {'waterlevel': 33, 'light_intensity': 31}
Published data Successfully: %s {'waterlevel': 86, 'light_intensity': 31}
Published data Successfully: %s {'waterlevel': 84, 'light_intensity': 34}
Published data Successfully: %s {'waterlevel': 22, 'light_intensity': 70}
Published data Successfully: %s {'waterlevel': 45, 'light_intensity': 51}
Published data Successfully: %s {'waterlevel': 48, 'light_intensity': 17}
Published data Successfully: %s {'waterlevel': 46, 'light_intensity': 68}
Published data Successfully: %s {'waterlevel': 10, 'light_intensity': 59}
Published data Successfully: %s {'waterlevel': 38, 'light_intensity': 9}
Published data Successfully: %s {'waterlevel': 80, 'light_intensity': 90}
Published data Successfully: %s {'waterlevel': 10, 'light_intensity': 28}
Published data Successfully: %s {'waterlevel': 77, 'light_intensity': 21}
Published data Successfully: %s {'waterlevel': 13, 'light_intensity': 42}
Published data Successfully: %s {'waterlevel': 22, 'light_intensity': 62}
Published data Successfully: %s {'waterlevel': 84, 'light_intensity': 30}
Published data Successfully: %s {'waterlevel': 43, 'light_intensity': 77}
Published data Successfully: %s {'waterlevel': 57, 'light_intensity': 56}
Published data Successfully: %s {'waterlevel': 62, 'light_intensity': 35}
Published data Successfully: %s {'waterlevel': 59, 'light_intensity': 15}
```


https://node-red-serzv-2021-07-09.eu-gb.mybluemix.net/ui/#!/0?socketid=gj1Mk9xrjeUyoxuTAAAH
smart home
sensor data
light intensity
44
0
100
water level
0%