SPRINT – 2

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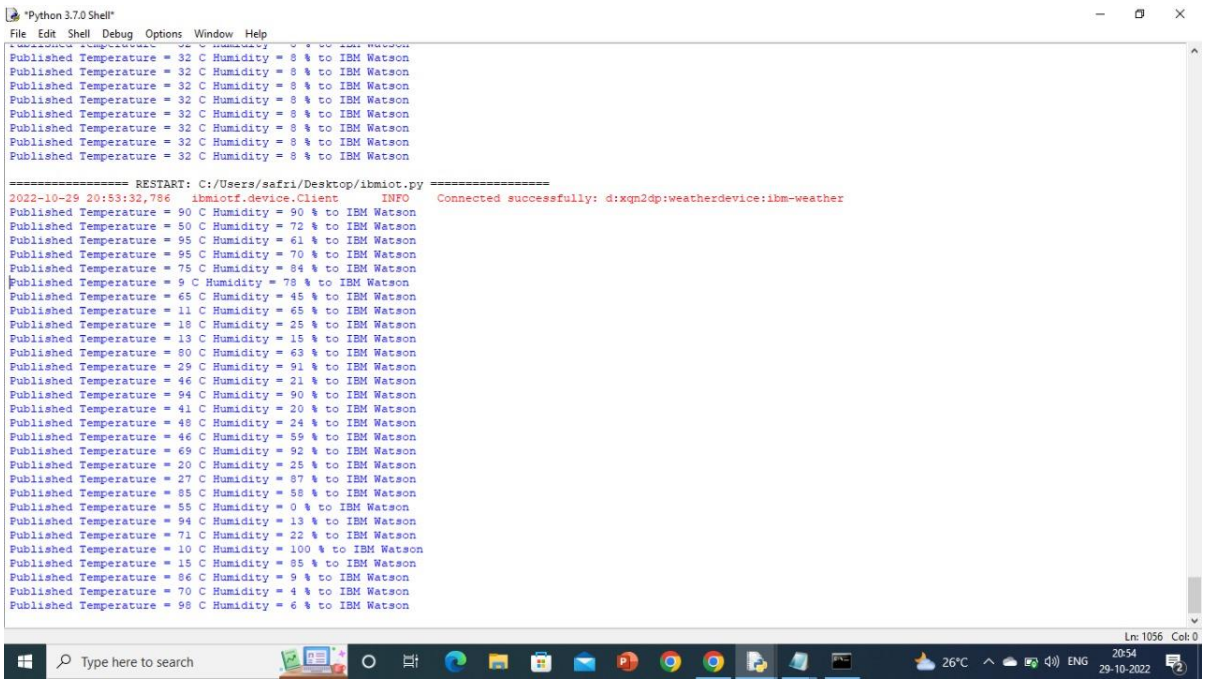
Python Code

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random



#Provide your IBM Watson Device
Credentialsorganization = "2melo1"
deviceType = "waste"
deviceId = "1234"
authMethod = "token"
authToken = "12345678"

# Initialize GPIO



def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="waste level":
        print ("waste level monitored")
    else :
        print ("weight level monitored")
```

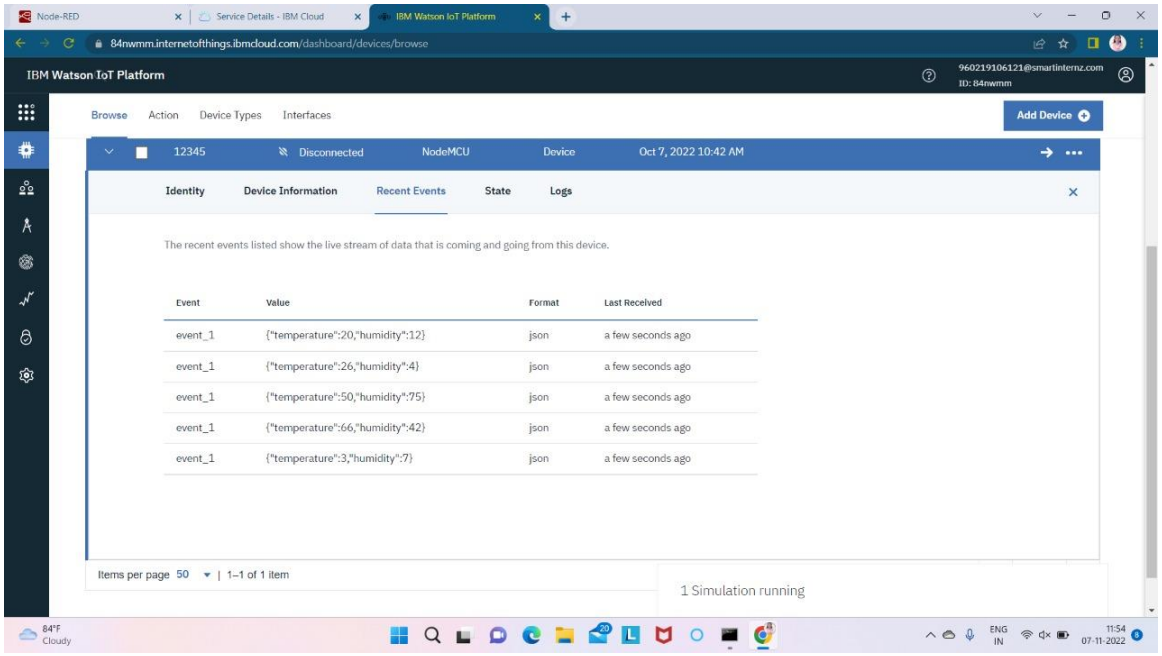
```
   #print(cmd)




try:

        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-
method":authMethod, "auth-token": authToken}

        deviceCli =

        ibmiotf.device.Client(deviceOptions)

        #.....


except Exception as e:

        print("Caught exception connecting device: %s" %

        str(e))sys.exit()


# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type
"greeting" 10 times

deviceCli.connect()


while True:

    #Get Sensor Data from DHT11


    level=random.randint(0,100)

    weight=random.randint(0,100)


    data = { 'level' : level, 'weight': weight

    }#print data
```

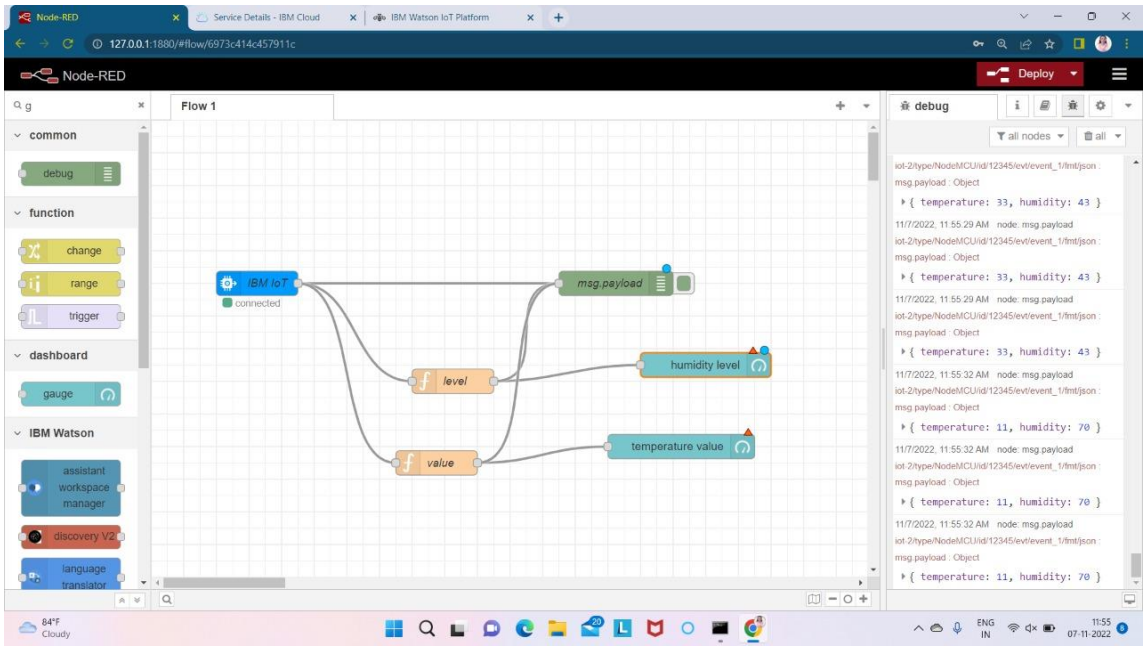
```
def myOnPublishCallback():
    print ("Published Level = %s %%" % level, "Weight = %s %%" % weight, "to IBM Watson")

success = deviceCli.publishEvent("IoTSensor", "json", data,
qos=0,on_publish=myOnPublishCallback)
if not success:
    print("Not connected to IoTF")
time.sleep(20)

deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from the cloud
deviceCli.disconnect()
```

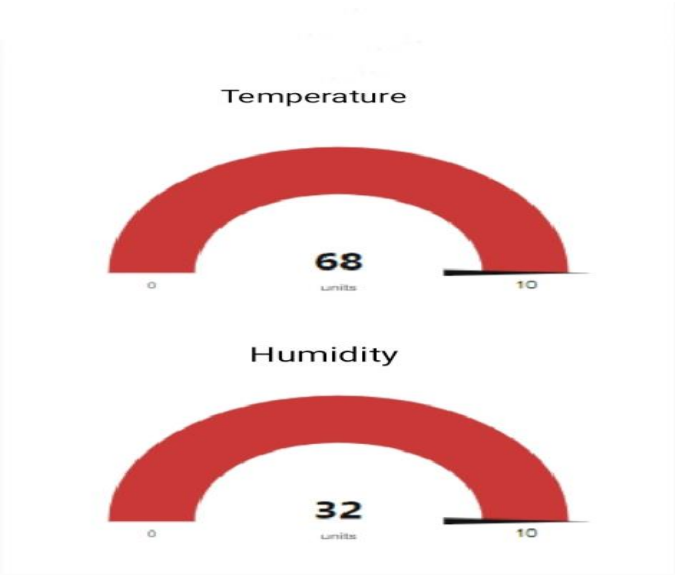
OUTPUT:



NODE RED INPUT AND OUPUT:






Temperature
68
0
units
10
Humidity
32
0
units
10