SPRINT – 2

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Python Code

```python
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")
```

```python
    #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
```
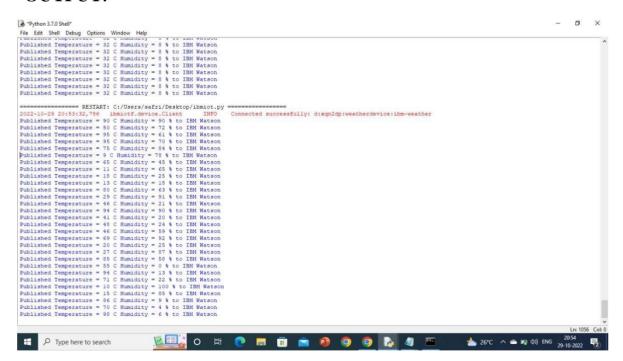
```
def myOnPublishCallback():

    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
units

0   10

Humidity

32
units

0   10