SPRINT – 2

Team ID:PNT2022TMID33002

Python Code

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random



#Provide your IBM Watson Device Credentials

organization = "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
```

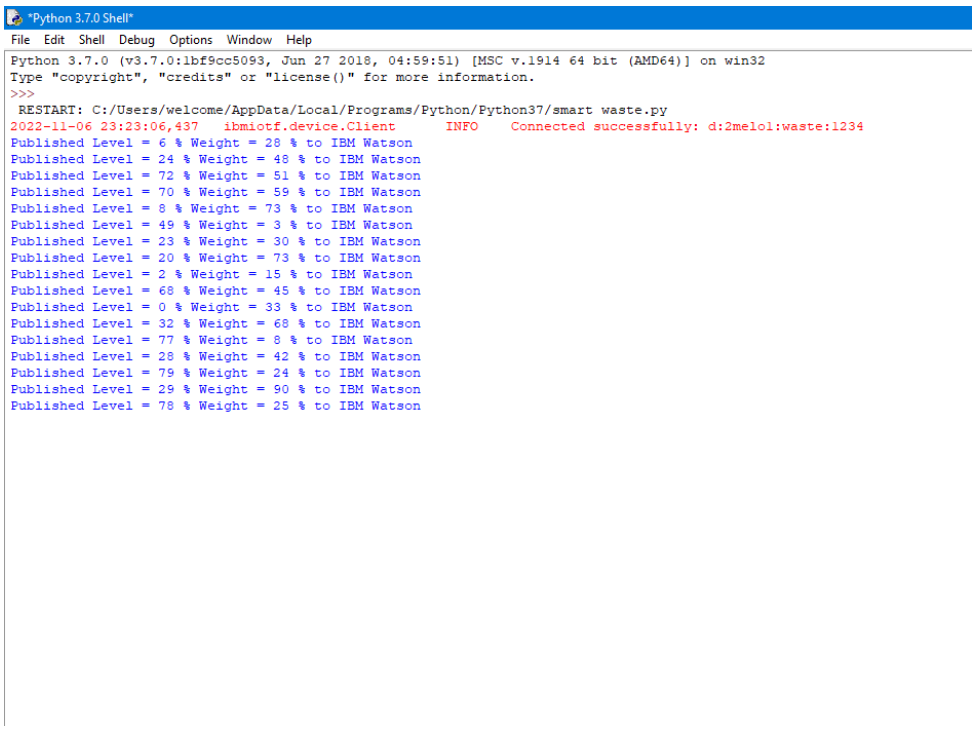
```
    def myOnPublishCallback():
        print ("Published Level = %s %%" % level, "Weight = %s %%" % weight, "to IBM Watson")


    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: