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Python Code

```
import time
import sys

import ibmiotf.application

import ibmiotf.device

import random

#Provide your IBM Watson Device Credentials organization

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("Notconnected    to

IoTTF")

            time.sleep(20)

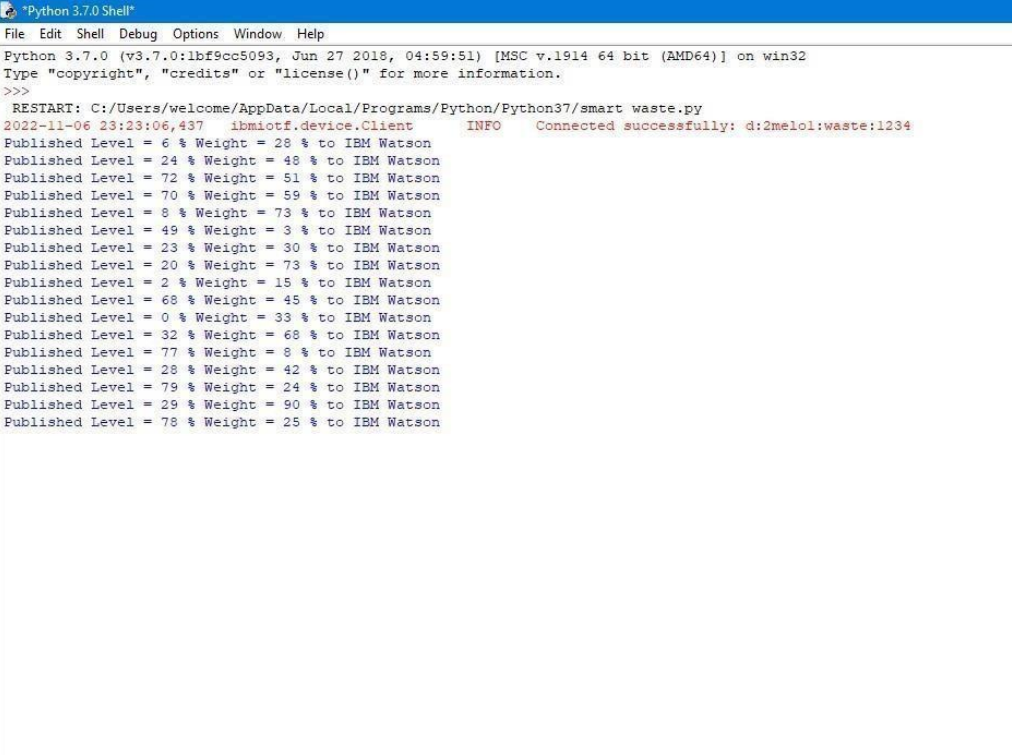
            deviceCli.commandCallbac

k=

            myCommandCallback

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

```



```

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:/Users/welcome/AppData/Local/Programs/Python/Python37/smart waste.py
2022-11-06 23:23:06,437 ibmiotf.device.Client INFO Connected successfully: d:2melol:waste:1234
Published Level = 6 % Weight = 28 % to IBM Watson
Published Level = 24 % Weight = 48 % to IBM Watson
Published Level = 72 % Weight = 51 % to IBM Watson
Published Level = 70 % Weight = 59 % to IBM Watson
Published Level = 8 % Weight = 73 % to IBM Watson
Published Level = 49 % Weight = 3 % to IBM Watson
Published Level = 23 % Weight = 30 % to IBM Watson
Published Level = 20 % Weight = 73 % to IBM Watson
Published Level = 2 % Weight = 15 % to IBM Watson
Published Level = 68 % Weight = 45 % to IBM Watson
Published Level = 0 % Weight = 33 % to IBM Watson
Published Level = 32 % Weight = 68 % to IBM Watson
Published Level = 77 % Weight = 8 % to IBM Watson
Published Level = 28 % Weight = 42 % to IBM Watson
Published Level = 79 % Weight = 24 % to IBM Watson
Published Level = 29 % Weight = 90 % to IBM Watson
Published Level = 78 % Weight = 25 % to IBM Watson

```













Databases

Database name

Create Database

{ } JSON

Your Databases

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	  
ricdredwjdjdy20221105	37.4 KB	4	No	  
sample	59.4 KB	351	No	  
sensor_data	15.7 KB	90	No	  

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