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 Credentials

organization


= "2melo1" deviceType =

"waste" deviceId = "1234" authMethod =

"token" authToken = "12345678"

# Initialize GPIO

def myCommandCallback(cmd):

print("Commandreceived: %s" %

cmd.data['command']) status=cmd.data['command']

ifstatus=="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:

```
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:2mello1:waste:1234
Published Level = 6 % Weight = 28 % to IBM Watson
Published Level = 24 % Weight = 48 % to IBM Watson
Published Level = 72 % Weight = 81 % to IBM Watson
Published Level = 70 % Weight = 89 % 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 = 62 % to IBM Watson
Published Level = 79 % Weight = 24 % to IBM Watson
Published Level = 29 % Weight = 93 % to IBM Watson
Published Level = 78 % Weight = 25 % to IBM Watson
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