SPRINT 2

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PYTHON CODE TO IBM

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


#Provide your IBM Watson Device Credentials
organization = "wu5b55" deviceType =
"crop1" deviceId = "1234" authMethod =
"token" authToken = "1234567890" #
Initialize GPIO


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

      temp=random.randint(0,100)
      Hum=random.randint(0,100)
      moisture=random.randint(0,100)

      data = { 'temperature' : temp, 'Humidity': Hum,
'Moisture':moisture }

      #print data def
      myOnPublishCallback():
         print ("Temperature = " + str(temp)+" C Humidity = " +
str(hum)+ " moisture = " + str(moisture) + "to IBM Watson")
```

```
        success = deviceCli.publishEvent("IoTSensor", "json", data,
qos=0, on_publish=myOnPublishCallback)
        if not success:
            print("Not connected to IoTF")
        time.sleep(10)

        deviceCli.commandCallback = myCommandCallback

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