

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 IoT")
```

```
    time.sleep(10) deviceCli.commandCallback =  
    myCommandCallback
```

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