

SPRINT-1  
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```
import time
import sys
import
import ibmiotf.application
import ibmiotf.device

# Provide your IBM Watson Device Credentials
organization = "lcft5g"
deviceType =
"Final"
deviceId =
"Hello"
authMethod =
"token"
authToken = "8300113450"

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 data point "hello" with value "world" into the cloud as an event of type
"greeting" 10 times
deviceCli.connect()
```

```
while True:
```

```
    # Get Sensor Data from
    DHT11temp = random.randint(
    0, 100)
    Humid = random.randint(
    0, 100)
    Gas = random.randint(0,
    100)
```

```
    data = {'temp': temp, 'Humid': Humid, 'Gas': gas}
    # print data
```

```
    def myOnPublishCallback():
```

```
        print("Published Temperature=%sC" % temp, "Humidity=%s%%" % Humid, "Gas
        Concentration=%s%%" % Gas, "to IBM Watson")
```

```
        success = deviceCli.publishEvent("IoT Sensor", "json", data, qos=0, on_publish=my
        OnPublishCallback)
```

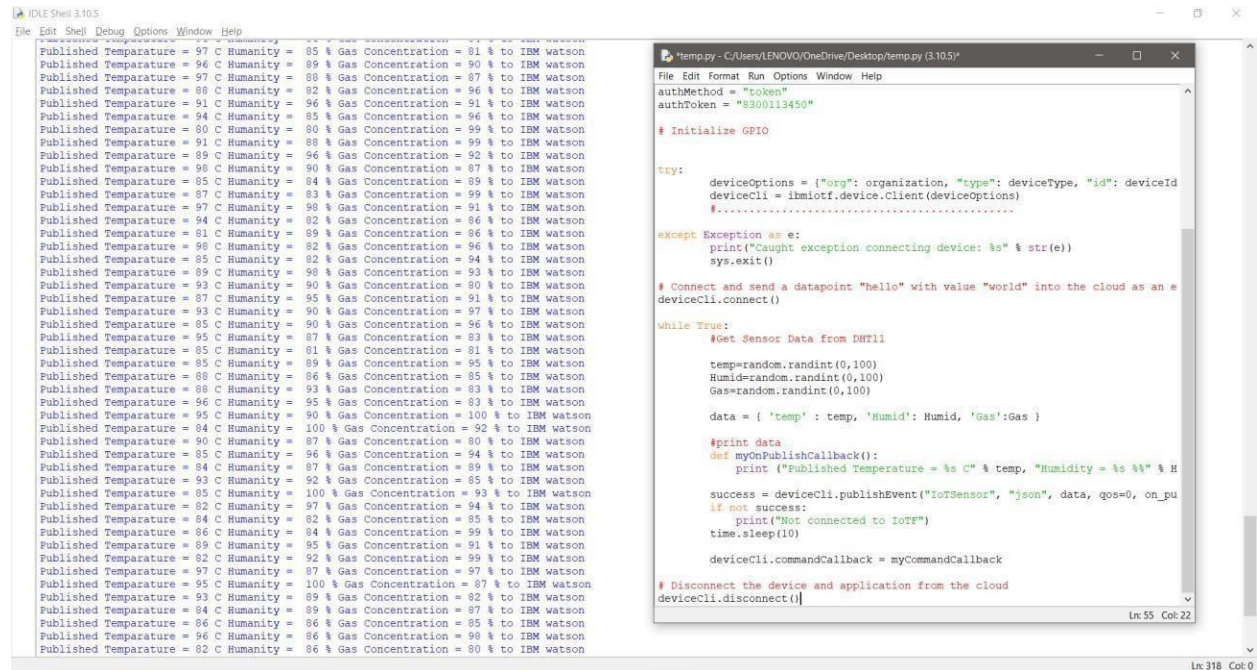
```
        if not success:
```

```
            print("Not connected to IoT F")
            time.sleep(10)
```

```
        deviceCli.commandCallback =
```

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

## Output:



```
Published Temperature = 97 C Humanity = 85 % Gas Concentration = 81 % to IBM watson
Published Temperature = 96 C Humanity = 89 % Gas Concentration = 90 % to IBM watson
Published Temperature = 97 C Humanity = 88 % Gas Concentration = 87 % to IBM watson
Published Temperature = 88 C Humanity = 82 % Gas Concentration = 96 % to IBM watson
Published Temperature = 94 C Humanity = 96 % Gas Concentration = 91 % to IBM watson
Published Temperature = 94 C Humanity = 85 % Gas Concentration = 96 % to IBM watson
Published Temperature = 80 C Humanity = 90 % Gas Concentration = 99 % to IBM watson
Published Temperature = 91 C Humanity = 88 % Gas Concentration = 99 % to IBM watson
Published Temperature = 89 C Humanity = 96 % Gas Concentration = 92 % to IBM watson
Published Temperature = 98 C Humanity = 90 % Gas Concentration = 87 % to IBM watson
Published Temperature = 85 C Humanity = 84 % Gas Concentration = 89 % to IBM watson
Published Temperature = 87 C Humanity = 83 % Gas Concentration = 99 % to IBM watson
Published Temperature = 97 C Humanity = 99 % Gas Concentration = 91 % to IBM watson
Published Temperature = 94 C Humanity = 82 % Gas Concentration = 86 % to IBM watson
Published Temperature = 81 C Humanity = 89 % Gas Concentration = 86 % to IBM watson
Published Temperature = 96 C Humanity = 82 % Gas Concentration = 96 % to IBM watson
Published Temperature = 85 C Humanity = 82 % Gas Concentration = 94 % to IBM watson
Published Temperature = 89 C Humanity = 90 % Gas Concentration = 93 % to IBM watson
Published Temperature = 93 C Humanity = 90 % Gas Concentration = 80 % to IBM watson
Published Temperature = 87 C Humanity = 95 % Gas Concentration = 91 % to IBM watson
Published Temperature = 93 C Humanity = 90 % Gas Concentration = 97 % to IBM watson
Published Temperature = 85 C Humanity = 90 % Gas Concentration = 96 % to IBM watson
Published Temperature = 95 C Humanity = 87 % Gas Concentration = 83 % to IBM watson
Published Temperature = 85 C Humanity = 81 % Gas Concentration = 81 % to IBM watson
Published Temperature = 85 C Humanity = 89 % Gas Concentration = 95 % to IBM watson
Published Temperature = 88 C Humanity = 86 % Gas Concentration = 85 % to IBM watson
Published Temperature = 88 C Humanity = 93 % Gas Concentration = 83 % to IBM watson
Published Temperature = 95 C Humanity = 95 % Gas Concentration = 83 % to IBM watson
Published Temperature = 95 C Humanity = 90 % Gas Concentration = 100 % to IBM watson
Published Temperature = 84 C Humanity = 100 % Gas Concentration = 92 % to IBM watson
Published Temperature = 90 C Humanity = 87 % Gas Concentration = 80 % to IBM watson
Published Temperature = 85 C Humanity = 96 % Gas Concentration = 94 % to IBM watson
Published Temperature = 84 C Humanity = 97 % Gas Concentration = 89 % to IBM watson
Published Temperature = 93 C Humanity = 92 % Gas Concentration = 85 % to IBM watson
Published Temperature = 85 C Humanity = 100 % Gas Concentration = 93 % to IBM watson
Published Temperature = 82 C Humanity = 97 % Gas Concentration = 94 % to IBM watson
Published Temperature = 84 C Humanity = 82 % Gas Concentration = 85 % to IBM watson
Published Temperature = 86 C Humanity = 84 % Gas Concentration = 99 % to IBM watson
Published Temperature = 89 C Humanity = 95 % Gas Concentration = 91 % to IBM watson
Published Temperature = 82 C Humanity = 92 % Gas Concentration = 99 % to IBM watson
Published Temperature = 97 C Humanity = 87 % Gas Concentration = 97 % to IBM watson
Published Temperature = 95 C Humanity = 100 % Gas Concentration = 87 % to IBM watson
Published Temperature = 93 C Humanity = 89 % Gas Concentration = 82 % to IBM watson
Published Temperature = 84 C Humanity = 89 % Gas Concentration = 87 % to IBM watson
Published Temperature = 86 C Humanity = 86 % Gas Concentration = 85 % to IBM watson
Published Temperature = 96 C Humanity = 86 % Gas Concentration = 98 % to IBM watson
Published Temperature = 82 C Humanity = 86 % Gas Concentration = 80 % to IBM watson
```

```
temp.py - C:/Users/LENOVO/OneDrive/Desktop/temp.py (3.10.5)
File Edit Format Run Options Window Help
authMethod = "token"
authToken = "8300113450"

# Initialize GPIO

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId}
    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 e
deviceCli.connect()

while True:
    #Get Sensor Data from DHT11

    temp=random.randint(0,100)
    Humid=random.randint(0,100)
    Gas=random.randint(0,100)

    data = { 'temp' : temp, 'Humid': Humid, 'Gas':Gas }

    #print data
    def myOnPublishCallback():
        print ("Published Temperature = %s C" % temp, "Humidity = %s %%" % H

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

    deviceCli.commandCallback = myCommandCallback

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

Ln: 55 Col: 22

Ln: 318 Col: 0