Team ID	PNT2022TMID00416
Date	04-11-2022
Project Development Phase	Sprint 2

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

#Provide your IBM Watson Device Credentials

organization = "slxa7t"
deviceType = "Hazard_iot"
deviceId = "hazard"
authMethod = "token"
authToken = "abcd1234"

# Initialize GPIO

def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    else :
        print ("led is off")

 #print(cmd)


try:
    deviceOptions = {"org": organization, "type": deviceType, "id":
deviceId, "auth-method": authMethod, "auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
```

```python
#................................................

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)
        Humid=random.randint(0,100)
        data = { 'temp' : temp, 'Humid': Humid }
        #print data
        def myOnPublishCallback():
            print("Published Temperature = %s C" % temp, "Humidity = %s
%%" % Humid, "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()
```

OUTPUT:

```
Command Prompt - python sprint2.py

Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\gh211>cd Downloads

C:\Users\gh211\Downloads>python sprint2.py
Caught exception connecting device: Unsupported authentication method: use-token-auth

C:\Users\gh211\Downloads>python sprint2.py
2022-11-17 16:41:52,344   ibmiotf.device.Client        INFO       Connected successfully: d:slxa7t:Hazard_iot:hazard
Published Temperature = 49 C Humidity = 75 % to IBM Watson
Published Temperature = 88 C Humidity = 94 % to IBM Watson
Published Temperature = 20 C Humidity = 24 % to IBM Watson
Published Temperature = 37 C Humidity = 19 % to IBM Watson
Published Temperature = 45 C Humidity = 44 % to IBM Watson
Published Temperature = 5 C Humidity = 0 % to IBM Watson
Published Temperature = 82 C Humidity = 97 % to IBM Watson
Published Temperature = 54 C Humidity = 63 % to IBM Watson
Published Temperature = 79 C Humidity = 47 % to IBM Watson
Published Temperature = 17 C Humidity = 89 % to IBM Watson
Published Temperature = 43 C Humidity = 58 % to IBM Watson
Published Temperature = 24 C Humidity = 50 % to IBM Watson
Published Temperature = 43 C Humidity = 32 % to IBM Watson
Published Temperature = 48 C Humidity = 70 % to IBM Watson
Published Temperature = 68 C Humidity = 41 % to IBM Watson
Published Temperature = 7 C Humidity = 84 % to IBM Watson
Published Temperature = 82 C Humidity = 11 % to IBM Watson
Published Temperature = 87 C Humidity = 49 % to IBM Watson
Published Temperature = 95 C Humidity = 77 % to IBM Watson
Published Temperature = 73 C Humidity = 35 % to IBM Watson
Published Temperature = 69 C Humidity = 94 % to IBM Watson
Published Temperature = 4 C Humidity = 93 % to IBM Watson
Published Temperature = 51 C Humidity = 93 % to IBM Watson
Published Temperature = 80 C Humidity = 48 % to IBM Watson
Published Temperature = 34 C Humidity = 53 % to IBM Watson
Published Temperature = 67 C Humidity = 47 % to IBM Watson
Published Temperature = 76 C Humidity = 43 % to IBM Watson
Published Temperature = 89 C Humidity = 32 % to IBM Watson
Published Temperature = 20 C Humidity = 28 % to IBM Watson
Published Temperature = 79 C Humidity = 3 % to IBM Watson
Published Temperature = 72 C Humidity = 27 % to IBM Watson
```