

Develop The Python Script

Develop A Python Script

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random\

#Provide your IBM Watson Device Credentials

organization ="8osflk"

deviceType = "cropprotection99"

deviceId = "cropprotection99"

authMethod="token"

authToken ="duiH-8z@4u@JXTmx20"

# InitializeGPIO

def myCommandCallback(cmd):

    print("Command received: %s" %cmd.data['command'])

    status =cmd.data['command']

    if status=="lighton":

        print("led on")

    else:

        print("led off")

#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()
```

```
#Connectandsendadatapoint"hello"withvalue"world"intothecloudasaneventoftype"greeting  
"10times
```

```
deviceCli.connect()
```

```
while True:
```

```
    #GetSensorDatafromDHT11
```

```
    temp=random.randint(0,100)
```

```
    humid=random.randint(0,100)
```

```
    data={'temperature':temp,'humidity':humid}
```

```
        #printdata
```

```
    def myOnPublishCallback():
```

```
        print("Published Temperature=%s C" %temp,"Humidity=%s %" % humid,"to  
IBMWatson")
```

```
success=deviceCli.publishEvent("IoTSensor","json",data,qos=0,on_publish=myOnPublishCallb  
ack)
```

```
if not success:
```

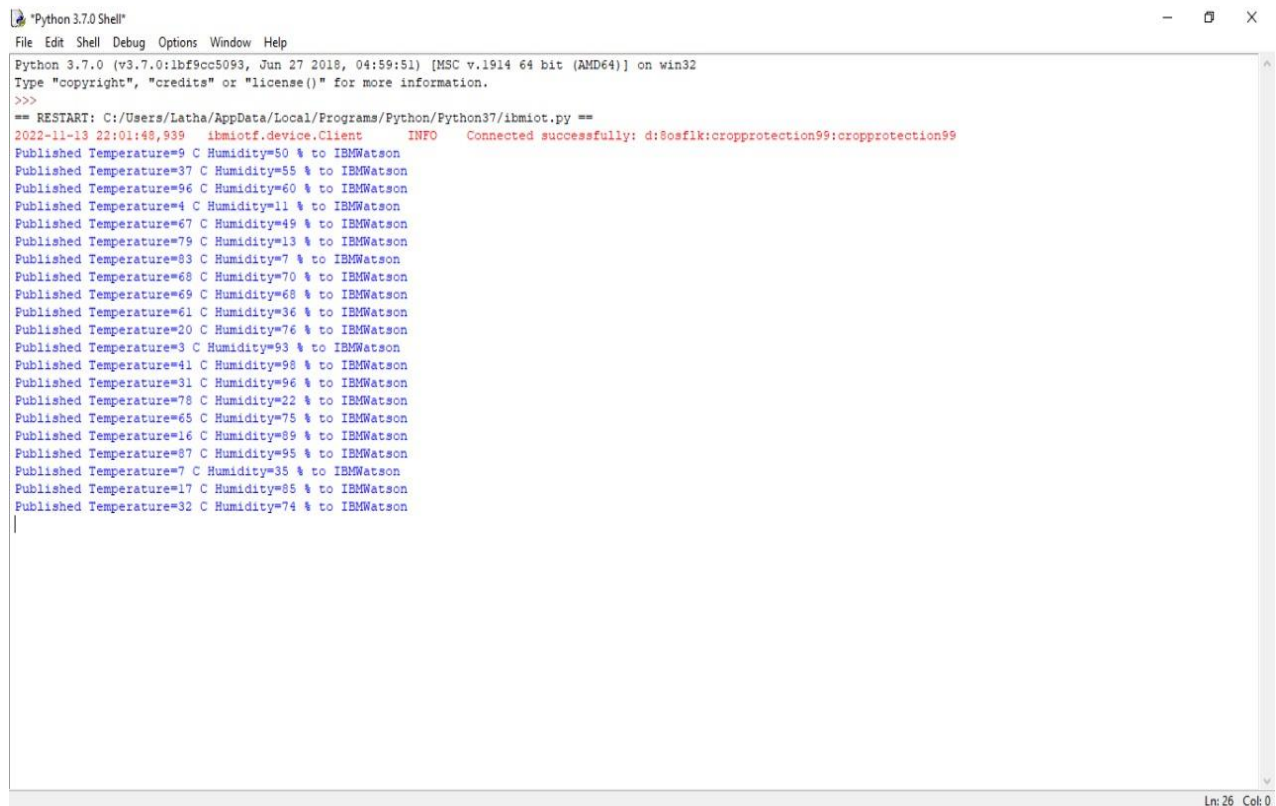
```
    print("NotconnectedtoloTF")
```

```
time.sleep(1)
```

```
deviceCli.commandCallback=myCommandCallback
```

```
#Disconnectthedeviceandapplicationfromthecloud
```

```
deviceCli.disconnect()
```



```
Python 3.7.0 Shell
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/Latha/AppData/Local/Programs/Python/Python37/ibmiot.py ==
2022-11-13 22:01:49,939 ibmiotf.device.Client INFO Connected successfully: d:8osfik:cropprotection99:cropprotection99
Published Temperature=9 C Humidity=50 % to IBMWatson
Published Temperature=37 C Humidity=55 % to IBMWatson
Published Temperature=96 C Humidity=60 % to IBMWatson
Published Temperature=4 C Humidity=11 % to IBMWatson
Published Temperature=67 C Humidity=49 % to IBMWatson
Published Temperature=79 C Humidity=13 % to IBMWatson
Published Temperature=83 C Humidity=7 % to IBMWatson
Published Temperature=68 C Humidity=70 % to IBMWatson
Published Temperature=69 C Humidity=68 % to IBMWatson
Published Temperature=61 C Humidity=36 % to IBMWatson
Published Temperature=20 C Humidity=76 % to IBMWatson
Published Temperature=3 C Humidity=93 % to IBMWatson
Published Temperature=41 C Humidity=98 % to IBMWatson
Published Temperature=31 C Humidity=96 % to IBMWatson
Published Temperature=78 C Humidity=22 % to IBMWatson
Published Temperature=65 C Humidity=75 % to IBMWatson
Published Temperature=16 C Humidity=89 % to IBMWatson
Published Temperature=87 C Humidity=95 % to IBMWatson
Published Temperature=7 C Humidity=35 % to IBMWatson
Published Temperature=17 C Humidity=85 % to IBMWatson
Published Temperature=32 C Humidity=74 % to IBMWatson
|
```

Ln: 26 Col: 0