

Develop The Python Code

Date	5 NOVEMBER 2022
Team ID	PNT2022TMID40916
Project Name	SMART FARMER – IOT ENABLED SMART FARMING APPLICATION SYSTEM.

Develop The Python Code

Develop the python code to publish and subscribe to the commands from the IBM cloud.

CODE:

```
import wiotp.sdk.device
import time
import os
import datetime
import random
myConfig = {
    "identity":{
        "orgId": "sw4p6z",
        "typeId": "FIRE",
        "deviceId": "WATER"
    },
    "auth": {
        "token": "12345678"
    }
}
client = wiotp.sdk.device.DeviceClient (config=myConfig,
logHandlers=None)
client.connect()
```

```

def myCommandCallback(cmd) :
    print("Message received from IBM IoT Platform: %s" %
cmd.data['command'])
    m=cmd.data['command']
    if(m== "motoron"):
        print("Motor is switched on")
    elif (m== "motoroff"):
        print ("Motor is switched OFF")
    print(" ")

while True:
    soil=random.randint(0,100)
    temp=random.randint(-20,125)
    hum=random.randint(0,100)
    myData={'soil_moisture': soil, 'temperature':temp,
'humidity':hum}
    client.publishEvent(eventId="status",
msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    time.sleep(100)
    client.commandCallback = myCommandCallback
    client.disconnect ()

```

