

## DEVELOP A PYTHON SCRIPT

```
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys
from twilio.rest import Client
import keys
Client = Client(keys.account_sid, keys.auth_token)
```

```
Organization
IDpnco2k
Device Type
watermonitoringsystem
Device ID
watermonitoringsystemi
d Authentication Method
use-token-auth
Authentication Token
y1KKoQTKx?i@jA&q9R
```

```
pH = random.randint(1, 14)
turbidity = random.randint(1,
1000)
temperature = random.randint(0, 100)
```

```
def myCommandCallback(cmd):
    print("Command Received: %s" %
cmd.data['command'])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()
```

```
deviceCli.connect()
```

```
while True:
    pH = random.randint(1, 14)
    turbidity = random.randint(1,
1000)
    temperature = random.randint(0, 100)

    data = {'pH': pH, 'turbid': turbidity, 'temp':
temperature}def myOnPublishCallback():
    print("Published pH= %s" % pH, "Turbidity:%s" % turbidity,
"Temperature:%s" %temperature)
```

```
    success = deviceCli.publishEvent("demo", "json", data, qos=0,  
on_publish=myOnPublishCallback)  
    if not success:  
        print("Not Connected to  
ibmiot")time.sleep(1)  
        deviceCli.commandCallback = myCommandCallback  
  
deviceCli.disconnect()
```