

## DEVELOP A PYHTON SCRIPT

```
import ibmiotf.application
import ibmiotf.device
import time
import random
import sys
from twilio.rest import Client
import os

account_sid= "XXXXXXXXXX"
auth_token="XXXXXXXXXX"
client = Client(account_sid, auth_token)

organization = "rwgui4"
deviceType = "NodeAPOS"
deviceId = "972001"
authMethod = "token"
authToken = "Licet@123"

pH = random.randint(1, 14)
turbidity = random.randint(-10, 10)

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(-10, 10)

    data = {'pH': pH, 'turbid': turbidity}
    def SMS():
```

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        message = client.messages.create(
            body="ALERT!! Water quality is degraded. Turn OFF motor",
            from_="+13608031287",
            to = "XXXXXXX")
        print(message.body)

    if pH<6 or pH>8 and turbidity>1:
        SMS()

    def myOnPublishCallback():
        print("Published pH= %s" % pH, "Turbidity:%s" % turbidity)

    success = deviceCli.publishEvent("demo", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not Connected to ibmiot")
    time.sleep(20)
    deviceCli.commandCallback = myCommandCallback

deviceCli.disconnect()

```