PYTHON SCRIPT

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Python Code:

```python
import time

import sys

import random

import ibmiot.application

import ibmiot.device

organization = "o86xnz"

deviceType = "Sensor"

deviceId = "123456"

authMethod = "auth"

authToken = "Ferdina22"


try:
```

```python
    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:


    temp=random.randint(0,100)

    Humid=random.randint(0,100)

    Gas=random.randint(0,100)


    data = { 'temp' : temp, 'Humid': Humid, 'Gas':gas }
```

```python
def myOnPublishCallback():

    print ("Published Temperature = %s C" % temp, "Humidity
= %s %%" %Humid, "Gas Concentration = %s" %Gas  )

    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


deviceCli.disconnect()
```

Output:

```python
import time
import sys
import random
import ibmiot.application
import ibmiot.device
organization = "o86xnz"
deviceType = "Sensor"
deviceId = "123456"
authMethod = "auth"
authToken = "Ferdina22"

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))
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deviceCli.connect()
while True:

    temp=random.randint(0,100)
    Humid=random.randint(0,100)
    Gas=random.randint(0,100)

    data = { 'temp' : temp, 'Humid': Humid, 'Gas':gas }

    def myOnPublishCallback():
        print ("Published Temperature = %s C" % temp, "Humidity = %s %%" %Humid, "Gas Concentration = %s" %Gas  )
    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

deviceCli.disconnect()
```

```
Published Temperature = 37 C Humidity = 99 % Gas Concentration = 58
Published Temperature = 7 C Humidity = 53 % Gas Concentration = 1
Published Temperature = 73 C Humidity = 78 % Gas Concentration = 42
Published Temperature = 74 C Humidity = 52 % Gas Concentration = 2
Published Temperature = 61 C Humidity = 64 % Gas Concentration = 69
Published Temperature = 7 C Humidity = 84 % Gas Concentration = 80
Published Temperature = 58 C Humidity = 91 % Gas Concentration = 95
Published Temperature = 20 C Humidity = 26 % Gas Concentration = 37
Published Temperature = 90 C Humidity = 85 % Gas Concentration = 98
Published Temperature = 14 C Humidity = 18 % Gas Concentration = 49
Published Temperature = 85 C Humidity = 38 % Gas Concentration = 8
Published Temperature = 42 C Humidity = 37 % Gas Concentration = 84
Published Temperature = 2 C Humidity = 88 % Gas Concentration = 34
Published Temperature = 6 C Humidity = 72 % Gas Concentration = 69
Published Temperature = 35 C Humidity = 100 % Gas Concentration = 78
Published Temperature = 80 C Humidity = 100 % Gas Concentration = 48
Published Temperature = 12 C Humidity = 98 % Gas Concentration = 37
Published Temperature = 38 C Humidity = 50 % Gas Concentration = 11
Published Temperature = 10 C Humidity = 14 % Gas Concentration = 24
Published Temperature = 90 C Humidity = 76 % Gas Concentration = 94
Published Temperature = 33 C Humidity = 17 % Gas Concentration = 92
Published Temperature = 71 C Humidity = 14 % Gas Concentration = 47
Published Temperature = 26 C Humidity = 56 % Gas Concentration = 43
Published Temperature = 100 C Humidity = 85 % Gas Concentration = 43
Published Temperature = 36 C Humidity = 37 % Gas Concentration = 34
Published Temperature = 6 C Humidity = 80 % Gas Concentration = 53
Published Temperature = 78 C Humidity = 4 % Gas Concentration = 70
Published Temperature = 50 C Humidity = 65 % Gas Concentration = 7
Published Temperature = 19 C Humidity = 60 % Gas Concentration = 47
Published Temperature = 28 C Humidity = 74 % Gas Concentration = 14
Published Temperature = 82 C Humidity = 17 % Gas Concentration = 73
Published Temperature = 5 C Humidity = 98 % Gas Concentration = 80
Published Temperature = 92 C Humidity = 78 % Gas Concentration = 33
Published Temperature = 47 C Humidity = 13 % Gas Concentration = 100
Published Temperature = 99 C Humidity = 72 % Gas Concentration = 83
Published Temperature = 69 C Humidity = 26 % Gas Concentration = 87
Published Temperature = 24 C Humidity = 96 % Gas Concentration = 16
Published Temperature = 97 C Humidity = 23 % Gas Concentration = 18
Published Temperature = 91 C Humidity = 31 % Gas Concentration = 0
Published Temperature = 4 C Humidity = 64 % Gas Concentration = 44
Published Temperature = 25 C Humidity = 7 % Gas Concentration = 38
Published Temperature = 99 C Humidity = 23 % Gas Concentration = 12
Published Temperature = 61 C Humidity = 21 % Gas Concentration = 24
Published Temperature = 54 C Humidity = 48 % Gas Concentration = 78
Published Temperature = 23 C Humidity = 87 % Gas Concentration = 50
Published Temperature = 43 C Humidity = 25 % Gas Concentration = 10
Published Temperature = 0 C Humidity = 32 %
```