

PYTHON CODE TO PUBLISH DATA TO IBM CLOUD

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Project Name	Gas leakage monitoring and alerting system

Develop python code :

```
import time
```

```
import sys
```

```
import ibmiotf.application
```

```
import ibmiotf.device
```

```
import random
```

```
#Provide your IBM Watson Device Credentials
```

```
organization = "u9pz01" deviceType = "abcd"
```

```
deviceId = "temphum" authMethod = "token"
```

```
authToken = "12345678"
```

```
# Initialize GPIO
```

```
def myCommandCallback(cmd):    print("Command
```

```
received:    %s"    %    cmd.data['command'])
```

```
status=cmd.data['command']    if status=="lighton":
```

```
print
```

```
("led is on")    elif status
```

```
=="lightoff":    print ("led is
```

```
off")    else:
```

```

        print("please send proper 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()

# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting"
10 times deviceCli.connect()

while True:
    #Get Sensor Data from DHT11

    temp=random.randint(90,110)
    Humid=random.randint(60,100)

    data = { 'temp': temp, 'Humid': Humid }
    #print data      def
myOnPublishCallback():
    print ("Published Temperature = %s C" % temp, "Humidity = %s %" % Humid, "to IBM
Watson")

    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
```

```
# Disconnect the device and application from the cloud deviceCli.disconnect()
```