Date	03 November 2022
Team ID	PNT2022TMID30972
Project Name	Project – Real-Time River Water Quality Monitoring and Control System

PYTHON SCRIPT

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random


organization="3albgm"
deviceType="NodeMCU"
deviceId="1234"
authMethod="token"
authToken="12345678"


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:


        temp=random.randint(-20,125)
        hum=random.randint(0,100)
        data={'temperature':temp,'humidity':hum}
```

```
        def myOnPublishCallback():
          print("published temperature=%d" %temp,"humidity=%d" %hum,"to ibm watson")



success=deviceCli.publishEvent("IotSensor","json",data,qos=0,on_publish=myOnPublishCallback)
        if not success:
           print("Not connected to IoTF")
        time.sleep(3)



deviceCli.disconnect()
```