Team ID	PNT2022TMID04554
Project Name	Industry-specific intelligent fire management system

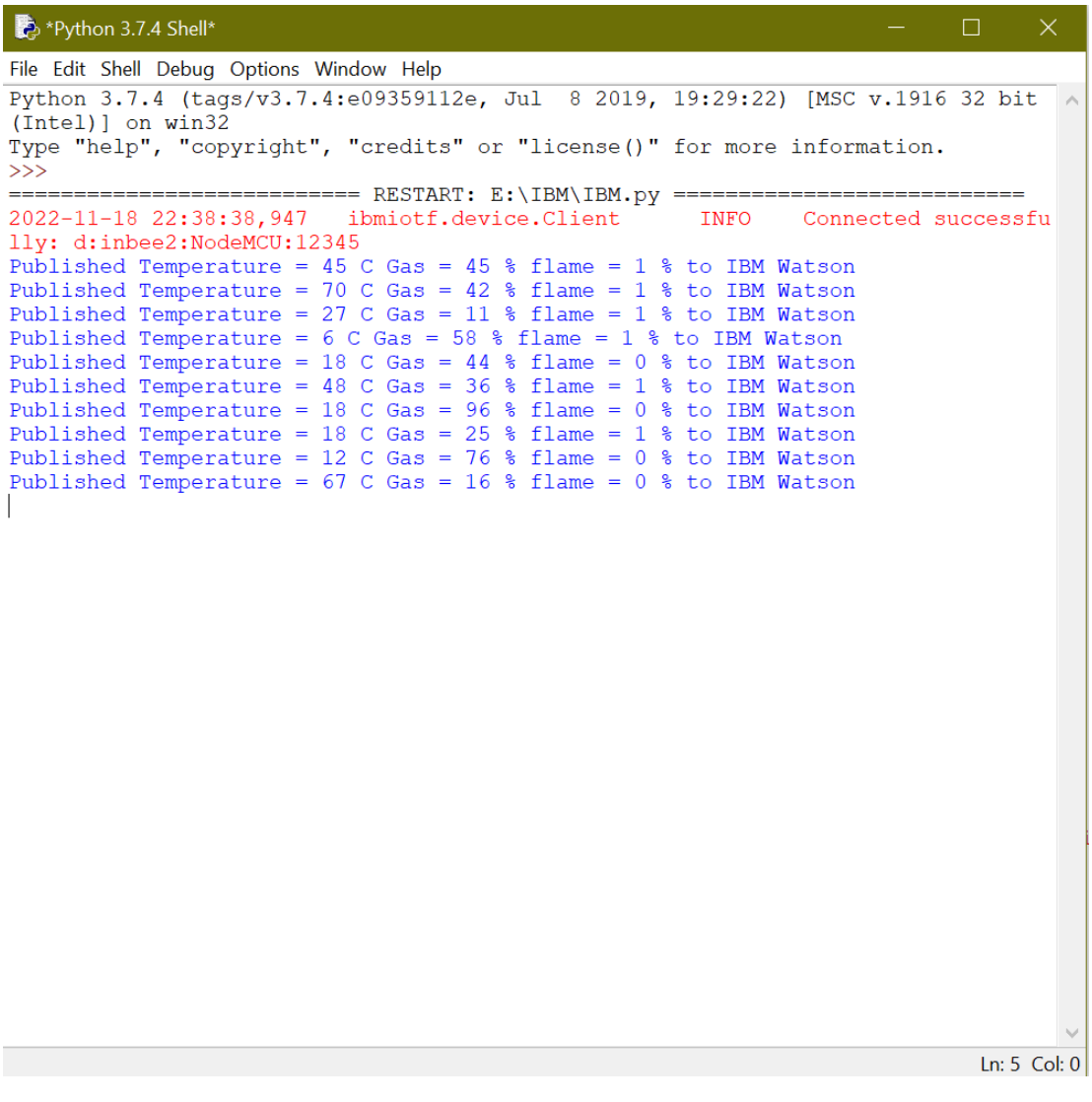
Sprite 2

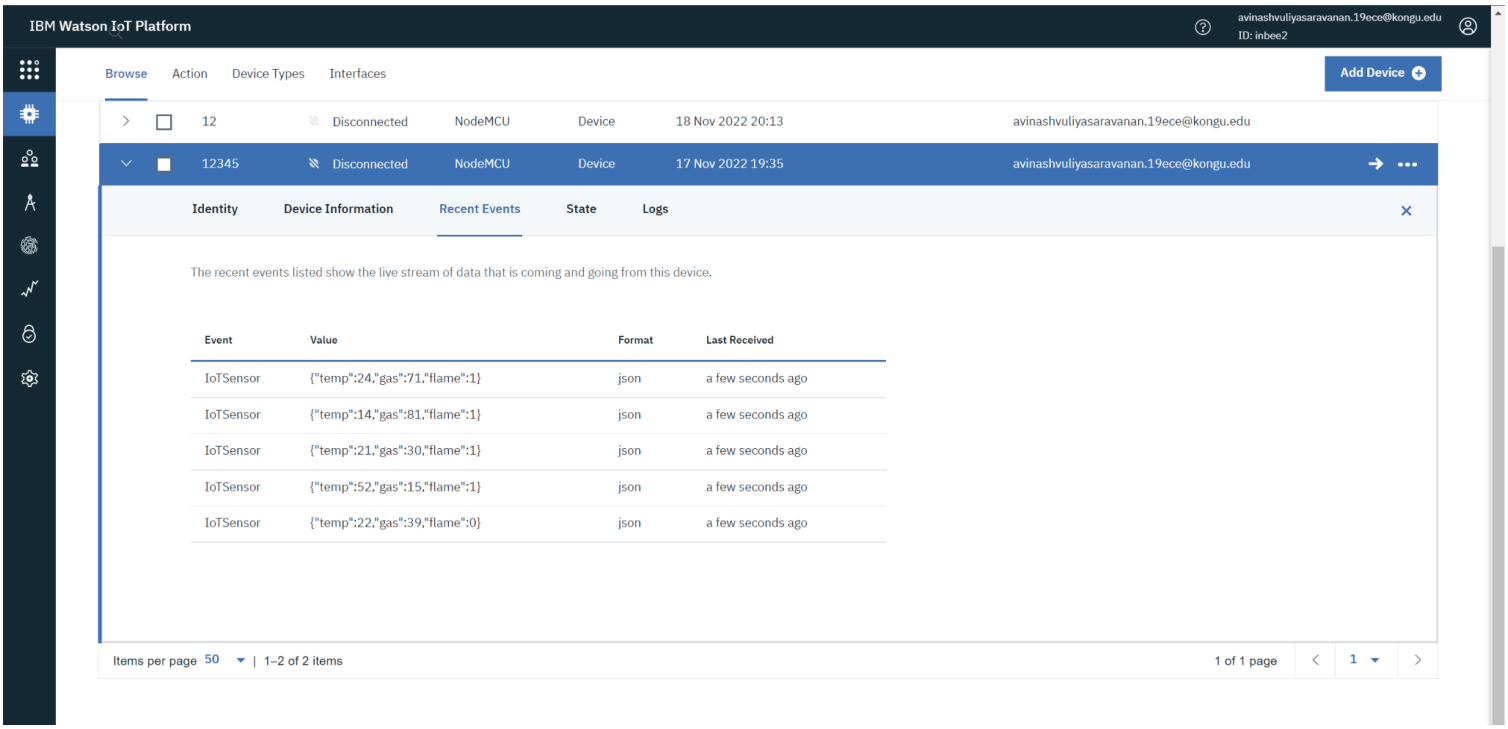
Code

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

organization = "inbee2"
deviceType = "NodeMCU"
deviceId = "12345"
authMethod = "token"
authToken = "12345678"

def myCommandCallback1(cmd):
    print("Command received: %s" % cmd.data['command'])
    status = cmd.data['command']
    if status == "sprinkleron":
        print("sprinkler is on")
    else:
        print("sprinkler is off")

    print(cmd)
```

```
def myCommandCallback2(cmd):
     print("Command received: %s" % cmd.data['command'])
     status = cmd.data['command']
     if status == "fanon":
         print("fan is on")
     else:
         print("fan is off")
     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(0,70)
    gas=random.randint(0,100)
    flame=random.randint(0,1)
    data = { 'temp' : temp, 'gas': gas, 'flame': flame }
    #print data
    def myOnPublishCallback():
```

```
        print ("Published Temperature = %s C" % temp, "Gas = %s
%%" %
gas, "flame = %s %%" % flame,"to IBM Watson")
    success = deviceCli.publishEvent("IoTSensor", "json", data,
qos=0,
on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoTF")
    time.sleep(1)
    deviceCli.commandCallback1 = myCommandCallback1
    deviceCli.commandCallback2 = myCommandCallback2
# Disconnect the device and application from the cloud
deviceCli.disconnect()
```




IBM Watson IoT Platform
avinashvuliyasaravanan.19ece@kongu.edu
ID: inbee2
Browse
Action
Device Types
Interfaces
Add Device
12 Disconnected NodeMCU Device 18 Nov 2022 20:13 avinashvuliyasaravanan.19ece@kongu.edu
12345 Disconnected NodeMCU Device 17 Nov 2022 19:35 avinashvuliyasaravanan.19ece@kongu.edu
Identity
Device Information
Recent Events
State
Logs
The recent events listed show the live stream of data that is coming and going from this device.
Event Value Format Last Received
IoTSensor {"temp":24,"gas":71,"flame":1} json a few seconds ago
IoTSensor {"temp":14,"gas":81,"flame":1} json a few seconds ago
IoTSensor {"temp":21,"gas":30,"flame":1} json a few seconds ago
IoTSensor {"temp":52,"gas":15,"flame":1} json a few seconds ago
IoTSensor {"temp":22,"gas":39,"flame":0} json a few seconds ago
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