

SPRINT-2

DATE	17 NOVEMBER 2022
TEAM ID	PNT2022TMID40922
PROJECT NAME	HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANT POWERED BY IoT

PYTHON CODE :

```
#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

myConfig = {"identity":

{

"orgId": "aqudbz",

"typeId": "NodeMCU",

"deviceId": "12345" },

"auth": { "token": "EON8Q6-UN@GTJ&zH-Q" }

}

def myCommandCallback(cmd):

print("Message received from IBM IoT Platform: %s" % cmd.data['command'])

m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)

client.connect()
```

```

while True:

    temp=random.randint(-20,125)

    hum=random.randint(0,100)

    myData={'temperature':temp, 'humidity':hum}

    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0,

    onPublish=None)

    print("Published data Successfully: %s", myData)

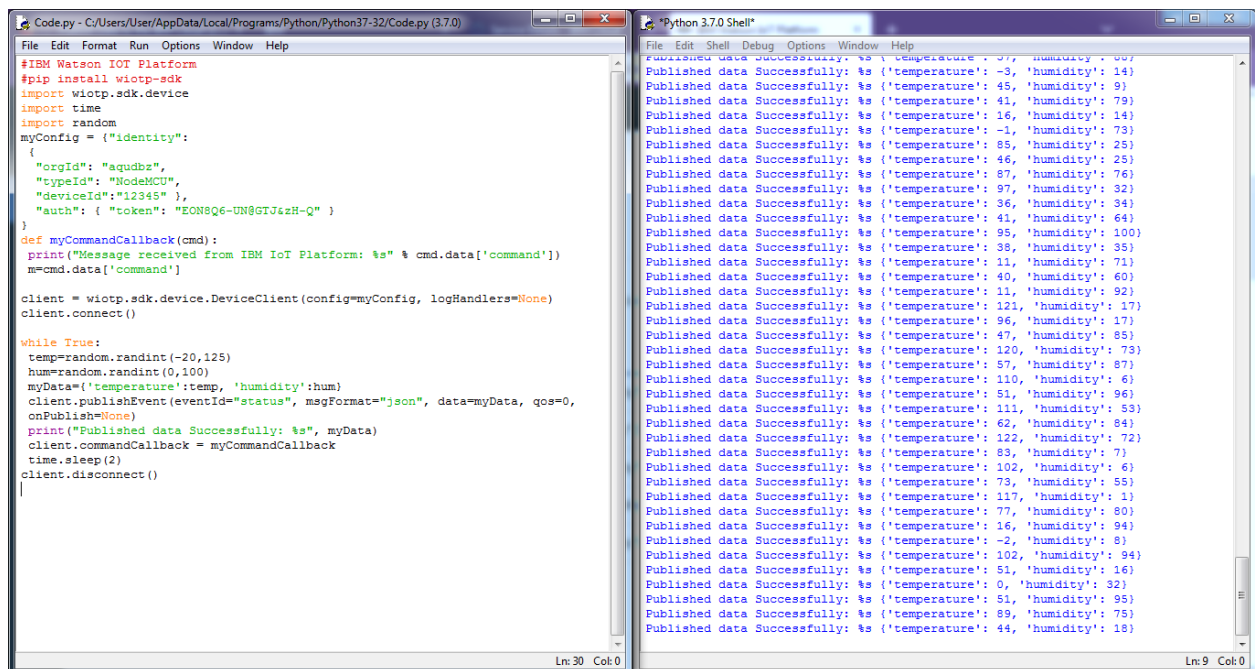
    client.commandCallback = myCommandCallback

    time.sleep(2)

    client.disconnect()

```

OUTPUT :



The image shows two side-by-side windows from a Windows operating system. The left window is a text editor titled 'Code.py - C:/Users/User/AppData/Local/Programs/Python/Python37-32/Code.py (3.7.0)'. It contains a Python script that uses the Watson IoT Platform SDK to publish temperature and humidity data. The script includes imports for the SDK, time, and random modules, and defines a configuration object, a command callback, and a main loop that publishes data every 2 seconds. The right window is a 'Python 3.7.0 Shell' showing the output of the script. It displays a series of messages: 'Published data Successfully: %s' followed by a JSON string containing temperature and humidity values. The values change every 2 seconds, as shown by the timestamps in the output.

```

Code.py - C:/Users/User/AppData/Local/Programs/Python/Python37-32/Code.py (3.7.0)
File Edit Format Run Options Window Help
#IBM Watson IoT Platform
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import wiotp.sdk.device
import time
import random
myConfig = {"identity":
{
    "orgId": "aqudbz",
    "typeId": "NodeMCU",
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    onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)
    client.disconnect()

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Published data Successfully: %s ('temperature': 37, 'humidity': 60)
Published data Successfully: %s ('temperature': -3, 'humidity': 14)
Published data Successfully: %s ('temperature': 45, 'humidity': 9)
Published data Successfully: %s ('temperature': 41, 'humidity': 79)
Published data Successfully: %s ('temperature': 16, 'humidity': 14)
Published data Successfully: %s ('temperature': -1, 'humidity': 73)
Published data Successfully: %s ('temperature': 85, 'humidity': 25)
Published data Successfully: %s ('temperature': 46, 'humidity': 25)
Published data Successfully: %s ('temperature': 87, 'humidity': 76)
Published data Successfully: %s ('temperature': 97, 'humidity': 32)
Published data Successfully: %s ('temperature': 36, 'humidity': 34)
Published data Successfully: %s ('temperature': 41, 'humidity': 64)
Published data Successfully: %s ('temperature': 95, 'humidity': 100)
Published data Successfully: %s ('temperature': 38, 'humidity': 35)
Published data Successfully: %s ('temperature': 11, 'humidity': 71)
Published data Successfully: %s ('temperature': 40, 'humidity': 60)
Published data Successfully: %s ('temperature': 11, 'humidity': 92)
Published data Successfully: %s ('temperature': 121, 'humidity': 17)
Published data Successfully: %s ('temperature': 96, 'humidity': 17)
Published data Successfully: %s ('temperature': 47, 'humidity': 85)
Published data Successfully: %s ('temperature': 120, 'humidity': 73)
Published data Successfully: %s ('temperature': 57, 'humidity': 87)
Published data Successfully: %s ('temperature': 110, 'humidity': 6)
Published data Successfully: %s ('temperature': 51, 'humidity': 96)
Published data Successfully: %s ('temperature': 111, 'humidity': 53)
Published data Successfully: %s ('temperature': 62, 'humidity': 84)
Published data Successfully: %s ('temperature': 122, 'humidity': 72)
Published data Successfully: %s ('temperature': 83, 'humidity': 7)
Published data Successfully: %s ('temperature': 102, 'humidity': 6)
Published data Successfully: %s ('temperature': 73, 'humidity': 55)
Published data Successfully: %s ('temperature': 117, 'humidity': 1)
Published data Successfully: %s ('temperature': 77, 'humidity': 80)
Published data Successfully: %s ('temperature': 16, 'humidity': 94)
Published data Successfully: %s ('temperature': -2, 'humidity': 8)
Published data Successfully: %s ('temperature': 102, 'humidity': 94)
Published data Successfully: %s ('temperature': 51, 'humidity': 16)
Published data Successfully: %s ('temperature': 0, 'humidity': 32)
Published data Successfully: %s ('temperature': 51, 'humidity': 95)
Published data Successfully: %s ('temperature': 89, 'humidity': 75)
Published data Successfully: %s ('temperature': 44, 'humidity': 18)
Ln: 30 Col: 0
Ln: 9 Col: 0

```