# PUBLISH DATA TO THE IBM CLOUD

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| Date | 27 October 2022 |
| Team ID | Based PNT2022TMID19008 |
| Project Name | IoT based Smart Waste Management System For Metropolitan Cities |

**Steps**

Install json, wiotp, time modules in python and develop a code with corresponding credentials to publish the temperature and humidity

```
#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random
myConfig = { "identity":
{
"orgId": "lp9sem",
"typeId": "smartwaste123",
"deviceId":"76013" },
"auth": { "token": "12345678" }
}
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()
```

Save and Run the code therefore temperature and humidity are published in Node RED

```
Published data Successfully: %s {'temperature': 66, 'humidity': 11}
Published data Successfully: %s {'temperature': -9, 'humidity': 37}
Published data Successfully: %s {'temperature': 19, 'humidity': 83}
Published data Successfully: %s {'temperature': 52, 'humidity': 58}
Published data Successfully: %s {'temperature': 27, 'humidity': 83}
Published data Successfully: %s {'temperature': 20, 'humidity': 28}
Published data Successfully: %s {'temperature': -12, 'humidity': 52}
Published data Successfully: %s {'temperature': 64, 'humidity': 97}
Published data Successfully: %s {'temperature': -4, 'humidity': 32}
Published data Successfully: %s {'temperature': 88, 'humidity': 44}
Published data Successfully: %s {'temperature': 59, 'humidity': 8}
Published data Successfully: %s {'temperature': 57, 'humidity': 62}
Published data Successfully: %s {'temperature': 25, 'humidity': 97}
Published data Successfully: %s {'temperature': 96, 'humidity': 17}
Published data Successfully: %s {'temperature': 102, 'humidity': 7}
Published data Successfully: %s {'temperature': 75, 'humidity': 13}
Published data Successfully: %s {'temperature': 41, 'humidity': 81}
Published data Successfully: %s {'temperature': 58, 'humidity': 85}
Published data Successfully: %s {'temperature': 120, 'humidity': 73}
Published data Successfully: %s {'temperature': -13, 'humidity': 88}
Published data Successfully: %s {'temperature': 48, 'humidity': 3}
Published data Successfully: %s {'temperature': 51, 'humidity': 85}
Published data Successfully: %s {'temperature': 113, 'humidity': 67}
Published data Successfully: %s {'temperature': -7, 'humidity': 15}
Published data Successfully: %s {'temperature': 55, 'humidity': 1}
Published data Successfully: %s {'temperature': 124, 'humidity': 32}
Published data Successfully: %s {'temperature': -6, 'humidity': 88}
Published data Successfully: %s {'temperature': 92, 'humidity': 84}
Published data Successfully: %s {'temperature': 105, 'humidity': 63}
Published data Successfully: %s {'temperature': 56, 'humidity': 67}
Published data Successfully: %s {'temperature': 63, 'humidity': 29}
Published data Successfully: %s {'temperature': 122, 'humidity': 53}
Published data Successfully: %s {'temperature': 27, 'humidity': 22}
Published data Successfully: %s {'temperature': 72, 'humidity': 27}
Published data Successfully: %s {'temperature': 44, 'humidity': 5}
Published data Successfully: %s {'temperature': 42, 'humidity': 89}
Published data Successfully: %s {'temperature': 95, 'humidity': 44}
Published data Successfully: %s {'temperature': 57, 'humidity': 92}
Published data Successfully: %s {'temperature': 75, 'humidity': 63}
```