

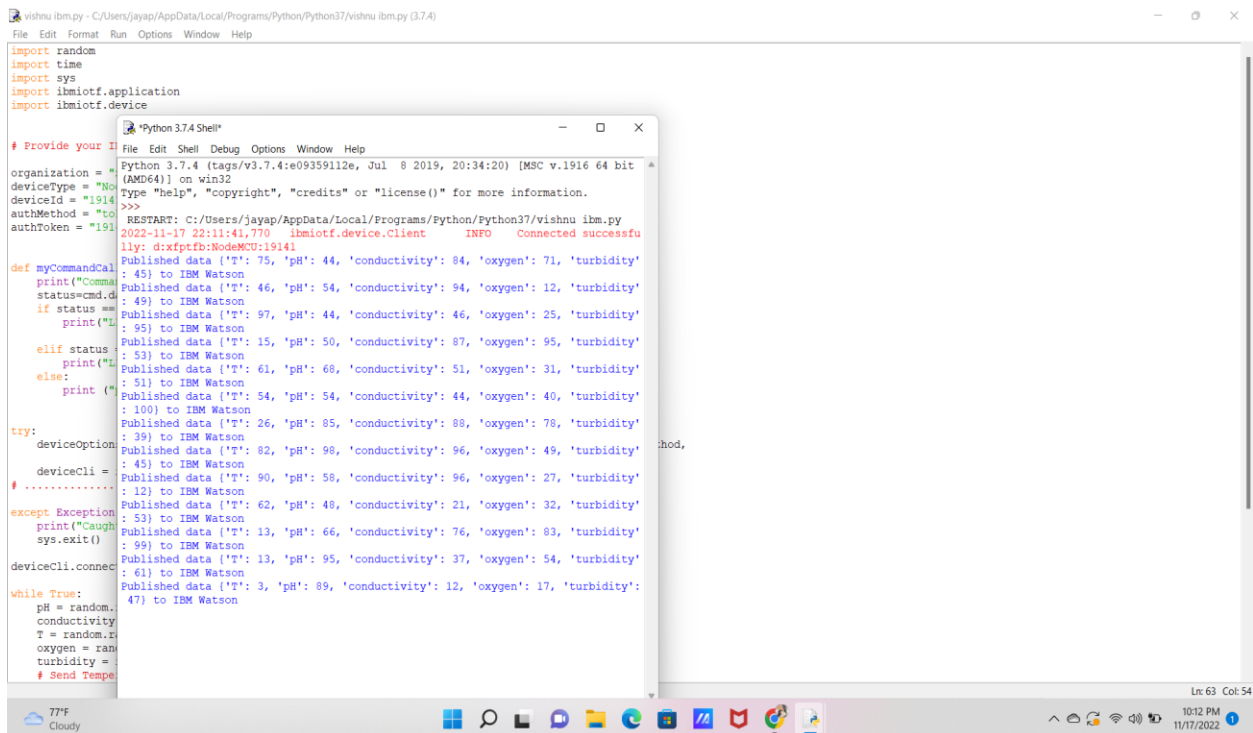
PUBLISH DATA TO THE IBM CLOUD

Team ID : PNT2022TMID06942

Project Name : Real time river water quality monitoring and Control System

Team Members:

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The screenshot shows a Python 3.7.4 Shell window with a script that publishes random water quality data to IBM Watson IoT. The script uses the `ibmiotf` library and a `deviceClient` to send data points. The output shows successful connections and data publishing for various parameters like pH, conductivity, oxygen, and turbidity.

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

# Provide your IBM Watson IoT credentials
organization = "..."
deviceType = "No"
deviceId = "1914"
authMethod = "token"
authToken = "1914"

def myCommandCallback(command, context):
    print("Command received: %s" % command)
    status = command
    if status == "publish":
        print("Publishing data to IBM Watson")
        data = {
            'T': 15, 'pH': 50, 'conductivity': 87, 'oxygen': 95, 'turbidity': 53
        }
        deviceClient.publish(deviceId, data)
    elif status == "connect":
        print("Connecting to IBM Watson")
        deviceClient.connect()
    else:
        print("Unknown command")

try:
    deviceClient = ibmiotf.device.DeviceClient(organization, deviceType, deviceId, authMethod, authToken)
    deviceClient.connect()
    deviceClient.subscribe(myCommandCallback)
    while True:
        pH = random.randint(10, 14)
        conductivity = random.randint(40, 100)
        oxygen = random.randint(10, 30)
        turbidity = random.randint(10, 100)
        data = {
            'T': 3, 'pH': 89, 'conductivity': 12, 'oxygen': 17, 'turbidity': 47
        }
        deviceClient.publish(deviceId, data)
        time.sleep(10)
except Exception as e:
    print("Caught exception: %s" % e)
    sys.exit()
```

CDCa x | Signu x | Micro x | whats x | IBM-P x | (5) Wh x | Servic x | IBM Vi x | Applic x | Node x | Node x | +

← → ↻ xptfb.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

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ID: xptfb

Browse

Action

Device Types

Interfaces

Add Device +

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
event	{ "T":13,"pH":66,"conductivity":76,"oxygen":83,"t...	json	a few seconds ago
event	{ "T":62,"pH":48,"conductivity":21,"oxygen":32,"t...	json	a few seconds ago
event	{ "T":90,"pH":58,"conductivity":96,"oxygen":27,"t...	json	a few seconds ago
event	{ "T":82,"pH":98,"conductivity":96,"oxygen":49,"t...	json	a few seconds ago
event	{ "T":26,"pH":85,"conductivity":88,"oxygen":78,"t...	json	a few seconds ago

0 Simulations running

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