

PNT2022TMID15636

REAL TIME RIVER WATER QUALITY MANAGEMENT

PUBLISH DATA_IBM CLOUD

The image shows a dual-screen view. On the left, a PyCharm IDE window displays a Python script named `Test_python_3.7.4.py`. The script generates random data for pH, turbidity, and temperature, formats it into a JSON object, and publishes it to the IBM Watson IoT Platform. The console output shows a continuous stream of published data points.

```
Test_python_3.7.4.py
42 pH = random.r
43 turbidity = random.randint(1,
44 temperature = random.randint(3
45
46 data = {'pH': pH, 'turbid': tur
47
48
49 # print(data)
50 def myOnPublishCallback():
    while True
```

Run: Test_python_3.7.4

Published pH= 4 Turbidity: 242 Temperature: 91
Published pH= 12 Turbidity: 564 Temperature: 54
Published pH= 2 Turbidity: 571 Temperature: 98
Published pH= 7 Turbidity: 677 Temperature: 65
Published pH= 8 Turbidity: 352 Temperature: 13
Published pH= 5 Turbidity: 862 Temperature: 88
Published pH= 3 Turbidity: 834 Temperature: 7
Published pH= 9 Turbidity: 213 Temperature: 89
Published pH= 14 Turbidity: 677 Temperature: 22
Published pH= 11 Turbidity: 292 Temperature: 160
Published pH= 2 Turbidity: 53 Temperature: 21
Published pH= 6 Turbidity: 499 Temperature: 69
Published pH= 11 Turbidity: 238 Temperature: 26
Published pH= 2 Turbidity: 443 Temperature: 43
Published pH= 6 Turbidity: 986 Temperature: 91
Published pH= 5 Turbidity: 593 Temperature: 85
Published pH= 14 Turbidity: 368 Temperature: 86
Published pH= 4 Turbidity: 532 Temperature: 8
Published pH= 3 Turbidity: 54 Temperature: 8

On the right, the IBM Watson IoT Platform dashboard is shown. The 'Browse' tab is active, displaying a table of recent events. The table has two columns: 'Event' and 'Value'. The events are labeled 'demo' and contain JSON strings representing the published data.

Event	Value
demo	{"pH":12,"turbid":93,"temp":87}
demo	{"pH":7,"turbid":873,"temp":94}
demo	{"pH":3,"turbid":204,"temp":19}
demo	{"pH":11,"turbid":304,"temp":77}
demo	{"pH":13,"turbid":16,"temp":50}

At the bottom of the dashboard, a device card for '00003' is shown, labeled 'Disconnected' and 'Micro_controller_2'.