

PUBLISH DATA TO THE IBM CLOUD

Team ID	PNT2022TMID33019
Project Name	Project Name - Real-Time River Water Quality Monitoring and Control System
Maximum Marks	4 Marks

The image shows a Python script in PyCharm and the IBM Watson IoT Platform dashboard. The script generates random pH, turbidity, and temperature data and publishes it to the IoT platform. The dashboard displays a live stream of this data.

Python Script (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 # print(data)
49
50 def myOnPublishCallback():
    while True

```

Run Output:

```

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:56 Temperature:8

```

IBM Watson IoT Platform Dashboard:

The dashboard shows a table of recent events:

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, a device named "Micro_controller_2" is shown with ID "00003" and status "Disconnected".