

PUBLISH DATA TO THE IBM CLOUD

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TEAM ID	PNT2022TMID36352
PROJECT NAME	REAL-TIME WATER QUALITY MONITORING AND CONTROL SYSTEM
MAXIMUM MARKS	4 MARKS

The image shows a Python IDE on the left and the IBM Watson IoT Platform interface on the right.

Python IDE (Left): The code in `test_python_3.7.4.py` generates random data for pH, turbidity, and temperature, and publishes it to the IoT platform. The console output shows a stream of published data points.

```

42 pH = random.r
43 turbidity = random.randint(1,
44 temperature = random.randint(0,
45
46 data = {'pH': pH, 'turbid': tur
47
48
49 # print(data)
50 def myOnPublishCallback():
51
52 while True
  
```

Run Console Output:

```

Published pH= 4 Turbidity:242 Temperature:71
Published pH= 13 Turbidity:564 Temperature:54
Published pH= 2 Turbidity:971 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:233 Temperature:89
Published pH= 14 Turbidity:677 Temperature:22
Published pH= 11 Turbidity:292 Temperature:188
Published pH= 2 Turbidity:53 Temperature:21
Published pH= 6 Turbidity:499 Temperature:69
Published pH= 11 Turbidity:238 Temperature:28
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:388 Temperature:86
Published pH= 4 Turbidity:532 Temperature:8
  
```

IBM Watson IoT Platform (Right): The 'Events' tab shows a live stream of data from the device 'Micro_controller_2'.

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, the device status is shown as 'Disconnected'.