

PUBLISH DATA TO THE IBM CLOUD

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| DATE | 16 NOVEMBER 2022 |
| TEAM ID | PNT2022TMID27380 |
| PROJECT NAME | REAL-TIME WATER QUALITY MONITORING AND CONTROL SYSTEM |
| MAXIMUM MARKS | 4 MARKS |

The image shows a Python script running in a Jupyter Notebook on the left and the IBM Watson IoT Platform interface on the right.

Python Script (Left):

```

import random
import time

# Generate random data
pH = random.random() * 2 + 2
turbidity = random.randint(1, 100)
temperature = random.randint(10, 100)

# Create a dictionary for the data
data = {'pH': pH, 'turbid': turbidity, 'temp': temperature}

# Print the data
print(data)

# Call the publish function
def myOnPublishCallback():
    # Publish the data to the IoT Platform
    # This is a placeholder for the actual publish function
    pass

# Run the script in a loop
while True:
    myOnPublishCallback()
    time.sleep(1)
    
```

IBM Watson IoT Platform (Right):

The interface shows a table of recent events. The table has two columns: Event and Value.

| 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 interface, there is a status bar showing the device ID 00003, a disconnected status, and the device name Micro_controller_2.