

PUBLISH DATA TO IBM CLOUD

Team ID	PNT2022TMID46761
Team Name	Real-Time River Water Quality Monitoring and Control System

OUTPUT FROM PYTHON CODE:

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Admin\Documents\realprogram.py =====
2022-11-16 19:59:45,414 ibmiotf.device.Client INFO Connected successfully: d:8egjb2:monitoring:monitoring123
Published, Temperature = 77 % pH_Value = 2 pH_Turbidity_Value = 72 % to IBM Watson
Published, Temperature = 18 % pH_Value = 6 pH_Turbidity_Value = 50 % to IBM Watson
Published, Temperature = 50 % pH_Value = 0 pH_Turbidity_Value = 49 % to IBM Watson
Published, Temperature = 7 % pH_Value = 9 pH_Turbidity_Value = 49 % to IBM Watson
Published, Temperature = 89 % pH_Value = 10 pH_Turbidity_Value = 0 % to IBM Watson
Published, Temperature = 64 % pH_Value = 5 pH_Turbidity_Value = 39 % to IBM Watson
Published, Temperature = 13 % pH_Value = 2 pH_Turbidity_Value = 41 % to IBM Watson
|
```

DEVICE CONNECTION:

The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area shows a table of devices with columns for Device ID, Status, Device Type, Class ID, and Date Added. Two devices are listed: 'Swethaa123' (Disconnected) and 'monitoring123' (Connected). The 'monitoring123' device is highlighted with a green status indicator. The dashboard also features a search bar, a 'Device Simulator' toggle, and a '0 Simulations running' status at the bottom.

Device ID	Status	Device Type	Class ID	Date Added
Swethaa123	Disconnected	Swethaa	Device	Oct 28, 2022 1:30 PM
monitoring123	Connected	monitoring	Device	Nov 16, 2022 9:58 AM

PUBLISHED DATA IN IMB CLOUD:

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes the IBM logo and the user's email address, swethaa1492001@gmail.com, with the ID 8egjb2. The left sidebar contains various icons for navigation. The main content area is titled "Device Drilldown - monitoring123" and features a "Back" button. A sidebar on the left lists navigation options: Connection Information (selected), Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions. The main content area displays "Connection Information" with the following details:

- Device ID: monitoring123
- Device Type: monitoring
- Date Added: Nov 16, 2022 9:58 AM
- Added By: swethaa1492001@gmail.com
- Connection Status: Connected
- Connection Time: Nov 16, 2022 7:51 PM
- Client Address: 103.88.77.173 SecureToken

At the bottom, there are sections for "Recent Events" and "0 Simulations running".

The screenshot shows the IBM Watson IoT Platform interface, similar to the previous one, but with the "Recent Events" section selected in the sidebar. The main content area displays "Recent Events" with the following details:

- The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
IoTSensor	{"Temp":37,"pH":13,"Turbidity":88}	json	a few seconds ago
IoTSensor	{"Temp":60,"pH":10,"Turbidity":76}	json	a few seconds ago
IoTSensor	{"Temp":10,"pH":0,"Turbidity":78}	json	a few seconds ago

At the bottom, there are sections for "State" and "0 Simulations running".