

The screenshot shows a Windows desktop with a taskbar at the bottom. The taskbar includes the Start button, a search icon, and several application icons: File Explorer, Microsoft Edge, a folder icon, a blue icon, a red icon, a green icon, and a yellow icon. The system tray on the right shows the date and time as 11/17/2022, 10:12 PM, and a battery level indicator.

The main window is a command prompt titled "Python 3.7.4 Shell". It shows the execution of a Python script named "vishnu_ibm.py". The script's output is as follows:

```
Python 3.7.4 (tags/v3.7.4:0935112e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
RESTART: C:\Users\jayap\AppData\Local\Programs\Python\Python37\vishnu_ibm.py
2022-11-17 22:11:41.770  ibmiotf.device.Client  INFO  Connected successfully: d:\xftpfb:NodeMCU:19141
Published data {'T': 75, 'pH': 44, 'conductivity': 84, 'oxygen': 71, 'turbidity': 45} to IBM Watson
Published data {'T': 46, 'pH': 54, 'conductivity': 94, 'oxygen': 12, 'turbidity': 45} to IBM Watson
Published data {'T': 97, 'pH': 44, 'conductivity': 46, 'oxygen': 25, 'turbidity': 95} to IBM Watson
Published data {'T': 15, 'pH': 50, 'conductivity': 87, 'oxygen': 95, 'turbidity': 53} to IBM Watson
Published data {'T': 61, 'pH': 68, 'conductivity': 51, 'oxygen': 31, 'turbidity': 51} to IBM Watson
Published data {'T': 54, 'pH': 54, 'conductivity': 44, 'oxygen': 40, 'turbidity': 100} to IBM Watson
Published data {'T': 26, 'pH': 85, 'conductivity': 88, 'oxygen': 78, 'turbidity': 39} to IBM Watson
Published data {'T': 82, 'pH': 96, 'conductivity': 96, 'oxygen': 49, 'turbidity': 45} to IBM Watson
Published data {'T': 90, 'pH': 58, 'conductivity': 96, 'oxygen': 27, 'turbidity': 12} to IBM Watson
Published data {'T': 62, 'pH': 48, 'conductivity': 21, 'oxygen': 32, 'turbidity': 53} to IBM Watson
Published data {'T': 13, 'pH': 66, 'conductivity': 76, 'oxygen': 83, 'turbidity': 99} to IBM Watson
Published data {'T': 13, 'pH': 95, 'conductivity': 37, 'oxygen': 54, 'turbidity': 61} to IBM Watson
Published data {'T': 3, 'pH': 89, 'conductivity': 12, 'oxygen': 17, 'turbidity': 47} to IBM Watson
while True:
    pH = random.randint(1, 100)
    conductivity = random.randint(1, 100)
    T = random.randint(1, 100)
    oxygen = random.randint(1, 100)
    turbidity = random.randint(1, 100)
    # Send Temperature and other data to IBM Watson
```

IBM Watson IoT Platform

vinu.1914137@gst.ac.in
ID: xfpfb

Browse Action Device Types Interfaces

Add Device

Identity Device Information **Recent Events** State Logs

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

Event	Value	Format	Last Received
event	{"T":13,"pH":66,"conductivity":76,"oxygen":83,"t...	json	a few seconds ago
event	{"T":62,"pH":48,"conductivity":21,"oxygen":32,"t...	json	a few seconds ago
event	{"T":90,"pH":58,"conductivity":96,"oxygen":27,"t...	json	a few seconds ago
event	{"T":82,"pH":98,"conductivity":96,"oxygen":49,"t...	json	a few seconds ago
event	{"T":26,"pH":85,"conductivity":88,"oxygen":78,"t...	json	a few seconds ago

0 Simulations running

Show all

Node-RED

node-red-xdyfi-2022-11-11.eu-gb.mybluemix.net/red/#flow/9d96f14f11d72727

Flow 1

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function

msg.payload

pH

conductivity

T

oxygen

turbidity

Light on

debug

```
17/11/2022, 22:13:18 node: f2f2649a 0d0d98  
iot-2/type/NodeMCU/id/19141/evl/event/ftml/json :  
msg.payload: Object  
{ T: 99, pH: 4, conductivity: 9,  
oxygen: 63, turbidity: 83 }  
17/11/2022, 22:13:18 node: f2f2649a 0d0d98  
iot-2/type/NodeMCU/id/19141/evl/event/ftml/json :  
msg.payload: number  
4  
17/11/2022, 22:13:19 node: f2f2649a 0d0d98  
iot-2/type/NodeMCU/id/19141/evl/event/ftml/json :  
msg.payload: number  
9  
17/11/2022, 22:13:20 node: f2f2649a 0d0d98  
iot-2/type/NodeMCU/id/19141/evl/event/ftml/json :  
msg.payload: number  
99  
17/11/2022, 22:13:20 node: f2f2649a 0d0d98  
iot-2/type/NodeMCU/id/19141/evl/event/ftml/json :  
msg.payload: number
```

node-red-xdyfi-2022-11-11.eu-gb.mybluemix.net/red/#flow/9d96f14f11d72727

Node-RED

filter nodes

- common
 - inject
 - debug
 - complete
 - catch
 - status
 - link in
 - link call
 - link out
 - comment
- function
 - function

Flow 1

turbidity

turbidity (/)

Light on

Light off

IBM IoT out

connected

msg.payload

[get] /command

http

[get] /sensor

mit

http

debug

all nodes

all

```
17/11/2022, 22:13:28 node: f2f2649a-0d0d98
iot-2/type/NodeMCUId/19141/evl/event/fmt/json :
msg.payload : Object
  { T: 50, pH: 52, conductivity: 0,
    oxygen: 16, turbidity: 65 }

17/11/2022, 22:13:28 node: f2f2649a-0d0d98
iot-2/type/NodeMCUId/19141/evl/event/fmt/json :
msg.payload : number
52

17/11/2022, 22:13:28 node: f2f2649a-0d0d98
iot-2/type/NodeMCUId/19141/evl/event/fmt/json :
msg.payload : number
0

17/11/2022, 22:13:28 node: f2f2649a-0d0d98
iot-2/type/NodeMCUId/19141/evl/event/fmt/json :
msg.payload : number
50

17/11/2022, 22:13:28 node: f2f2649a-0d0d98
iot-2/type/NodeMCUId/19141/evl/event/fmt/json :
msg.payload : number
```

IBM PROJECT_FL...docx

Type here to search

25°C Cloudy 10:14 PM 11/17/2022