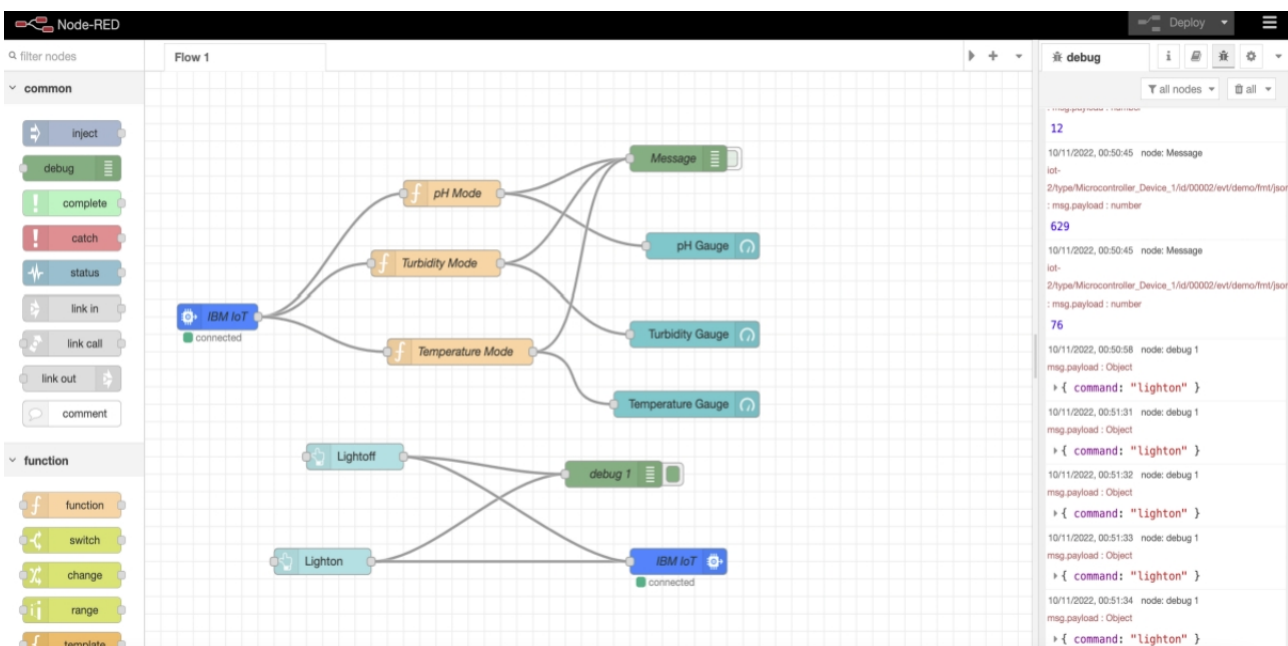
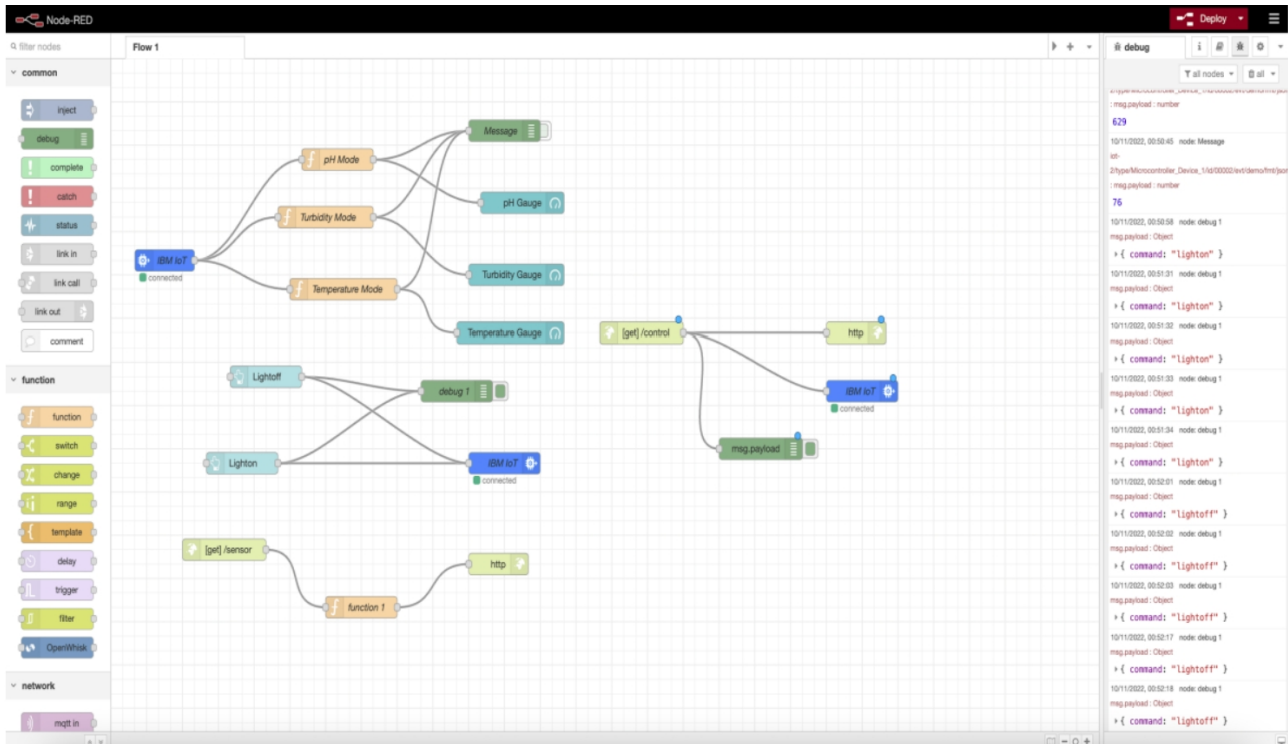


Project Name : Real-Time River Water Quality Monitoring and Control System

Project Team ID : PNT2022TMID12872

Final Architecture



The screenshot shows the PyCharm IDE with a project named 'Test_Python_3.7.4'. The file explorer on the left lists files: 'd_lwkiec_IOT_Device_1_00001.log', 'd_lwkiec_Microcontroller_Device_1_00002.log', 'keys.py', 'main.py', and 'Test_python_3.7.4.py'. The editor displays 'Test_python_3.7.4.py' with the following code:

```
27 else:
28     print("Led is off")
29     #print(cmd)
30
31
32 try:
33     deviceOptions = {"name": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod}
34     while True
```

The 'Run' console at the bottom shows the output of the script:

```
Published pH= 5 Turbidity:36 Temperature:79
Published pH= 2 Turbidity:311 Temperature:92
Published pH= 4 Turbidity:420 Temperature:10
Published pH= 13 Turbidity:655 Temperature:76
Published pH= 2 Turbidity:991 Temperature:2
Published pH= 3 Turbidity:521 Temperature:77
Published pH= 11 Turbidity:565 Temperature:65
Published pH= 14 Turbidity:914 Temperature:23
Published pH= 2 Turbidity:190 Temperature:18
Command Received: lighton
Led is on
Command Received: lighton
Led is on
Command Received: lighton
Led is on
Published pH= 13 Turbidity:641 Temperature:70
Command Received: lighton
Led is on
Published pH= 2 Turbidity:907 Temperature:7
Published pH= 7 Turbidity:343 Temperature:67
Published pH= 11 Turbidity:41 Temperature:69
Published pH= 2 Turbidity:30 Temperature:45
Published pH= 3 Turbidity:948 Temperature:39
Published pH= 2 Turbidity:114 Temperature:27
Published pH= 5 Turbidity:936 Temperature:0
Published pH= 14 Turbidity:524 Temperature:1
Published pH= 11 Turbidity:685 Temperature:12
```

The status bar at the bottom indicates '363:1 LF UTF-8 4 spaces Python 3.7'.

The screenshot shows the PyCharm IDE with the same project and files as the first image. The editor displays the same code for 'Test_python_3.7.4.py'.

The 'Run' console shows the output of the script:

```
Published pH= 6 Turbidity:699 Temperature:60
Published pH= 13 Turbidity:364 Temperature:70
Published pH= 10 Turbidity:629 Temperature:93
Published pH= 6 Turbidity:95 Temperature:79
Command Received: lightoff
Led is off
Command Received: lightoff
Led is off
Command Received: lightoff
Led is off
Published pH= 13 Turbidity:517 Temperature:28
Published pH= 3 Turbidity:561 Temperature:20
Published pH= 9 Turbidity:407 Temperature:34
Published pH= 11 Turbidity:858 Temperature:51
Published pH= 1 Turbidity:719 Temperature:86
Published pH= 14 Turbidity:604 Temperature:48
Published pH= 9 Turbidity:79 Temperature:75
Published pH= 13 Turbidity:500 Temperature:76
Command Received: lightoff
Led is off
Command Received: lightoff
Led is off
Published pH= 3 Turbidity:306 Temperature:11
Published pH= 6 Turbidity:837 Temperature:72
Published pH= 11 Turbidity:389 Temperature:61
Published pH= 7 Turbidity:886 Temperature:11
Published pH= 4 Turbidity:648 Temperature:20
```

The status bar at the bottom indicates '371:1 LF UTF-8 4 spaces Python 3.7'.