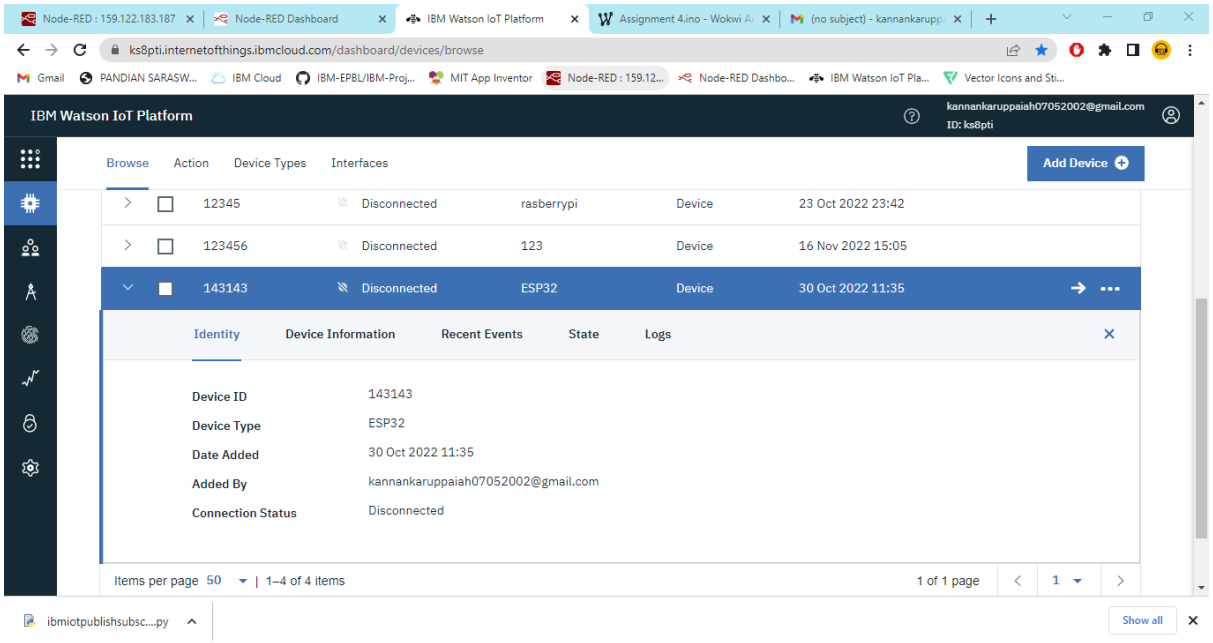
WORK FLOW

Team ID	PNT2022TMID47935
Project Name	Real-time river water quality monitoring and control system

COMMUNICATION AMONG MIT APP, NODE-RED, IBM IOT WATSON AND PYTHON

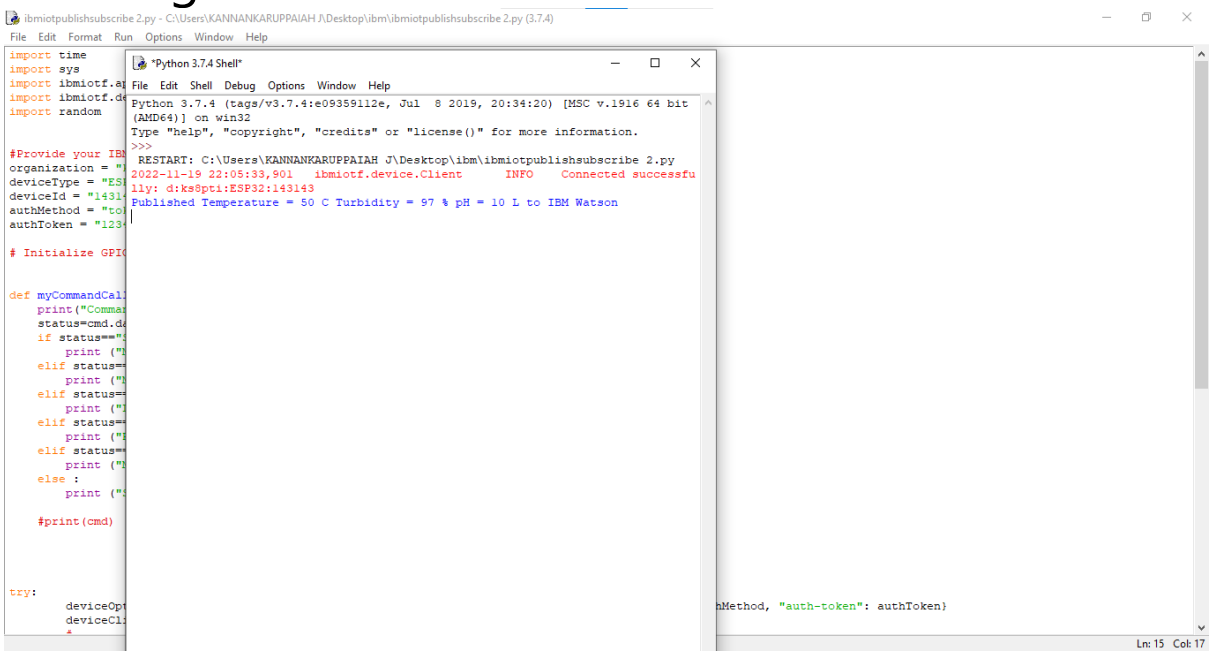
Python code:

Before Run the python code, The IOT platform is disconnected

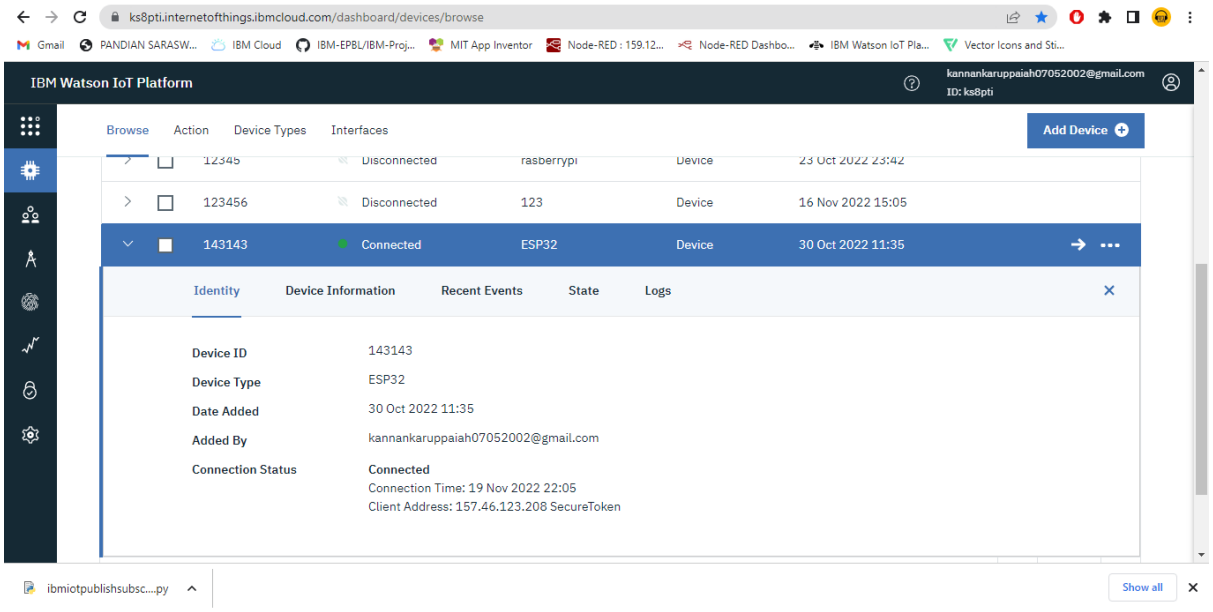


Run the Python code:

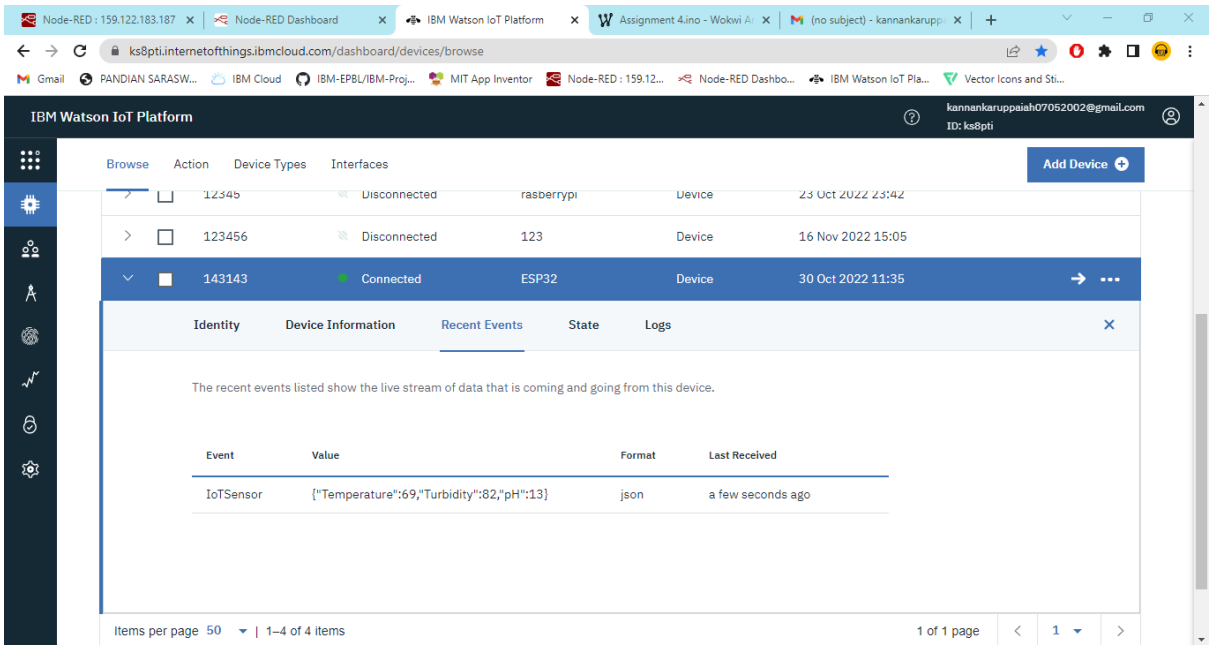
After running the python code the data's are showing in IDLE



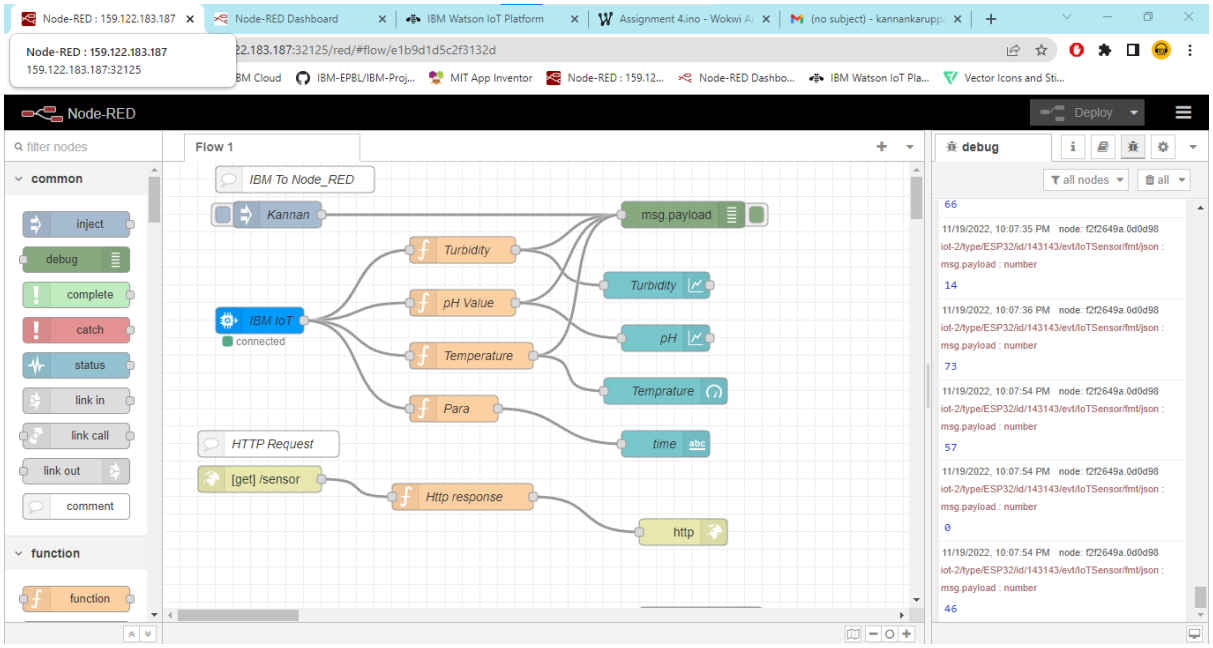
Now the IBM IoT Watson platform is connected



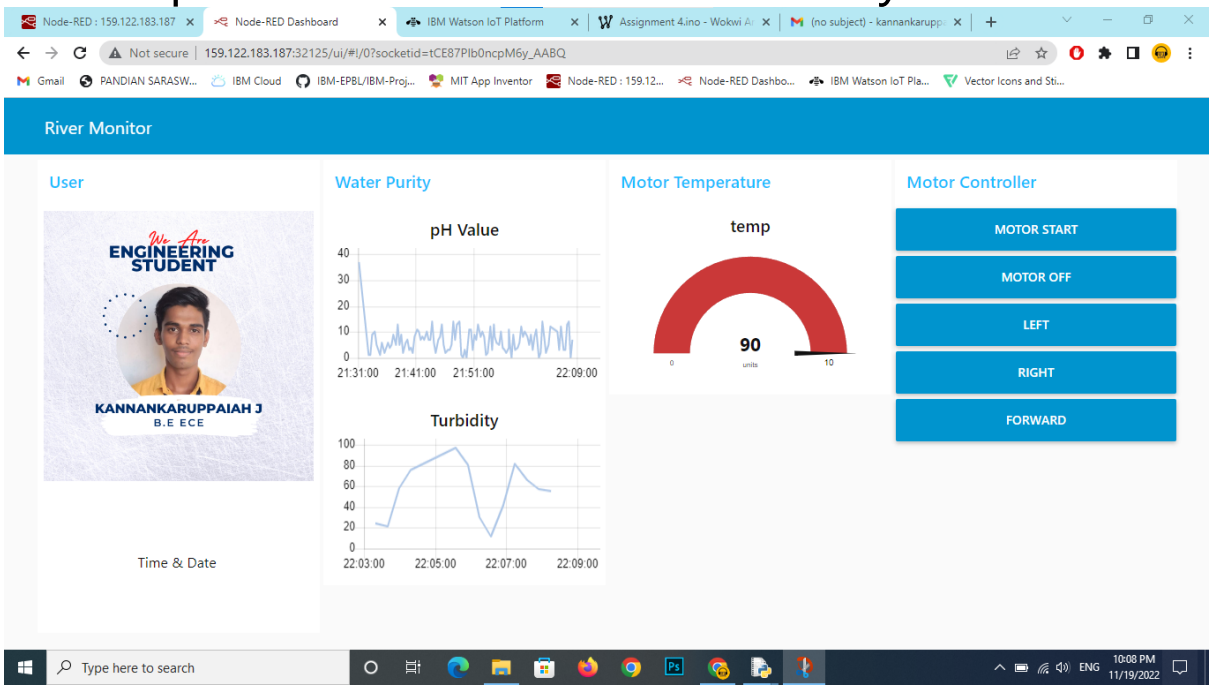
IoT Device ESP32 is connected with python code , Then the data's are collected and shown in recent events



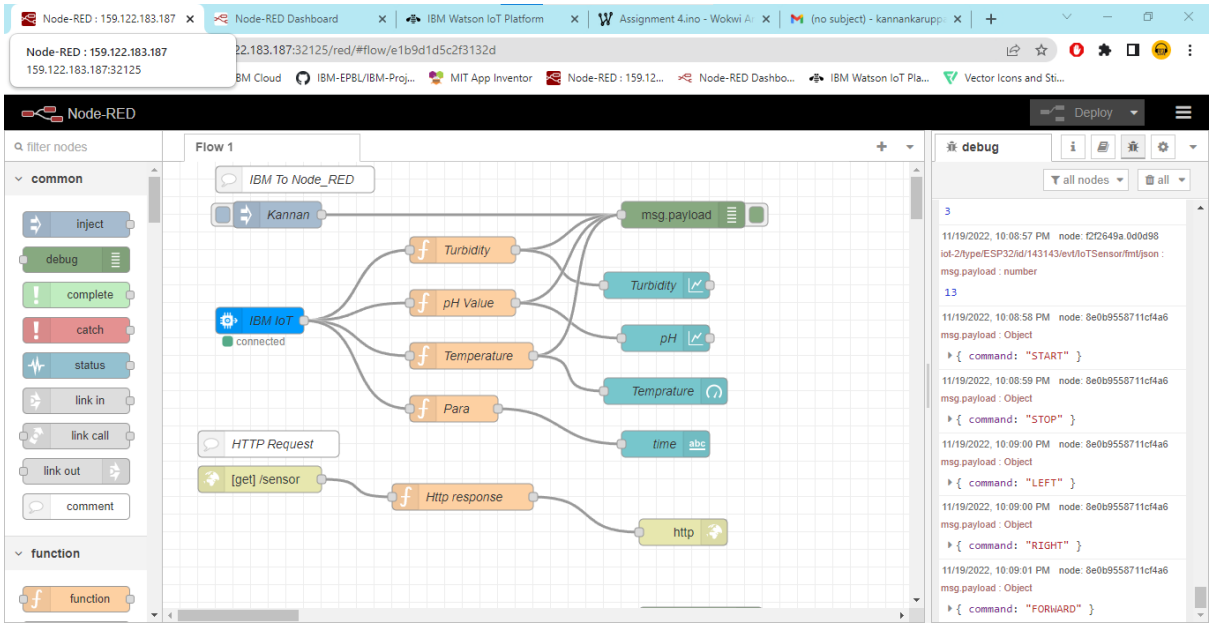
The Node-RED is connected with the IBM IoT platform .
IBM IoT is pass the data to the Node-Red.
Node-RED is collected the all data and display in debug window



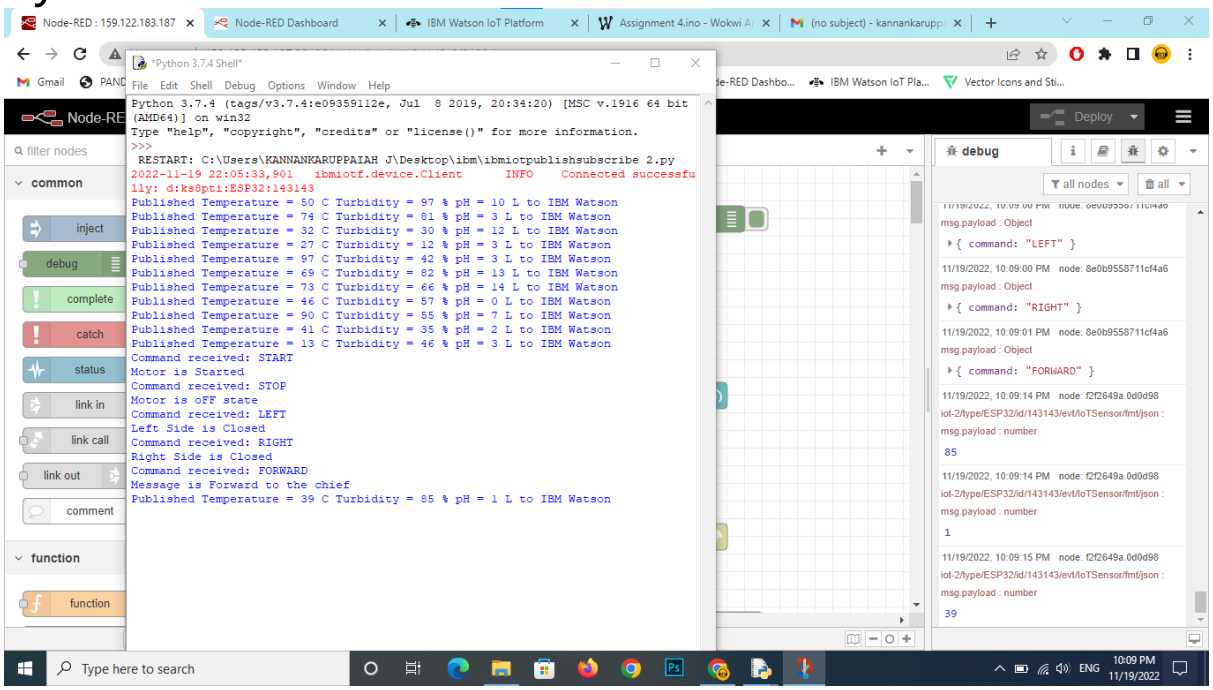
Node-RED Dashboard is Showing every data.
When we click the buttons in dashboard the result will be publish both Node-RED and Python



Node-RED OUTPUT



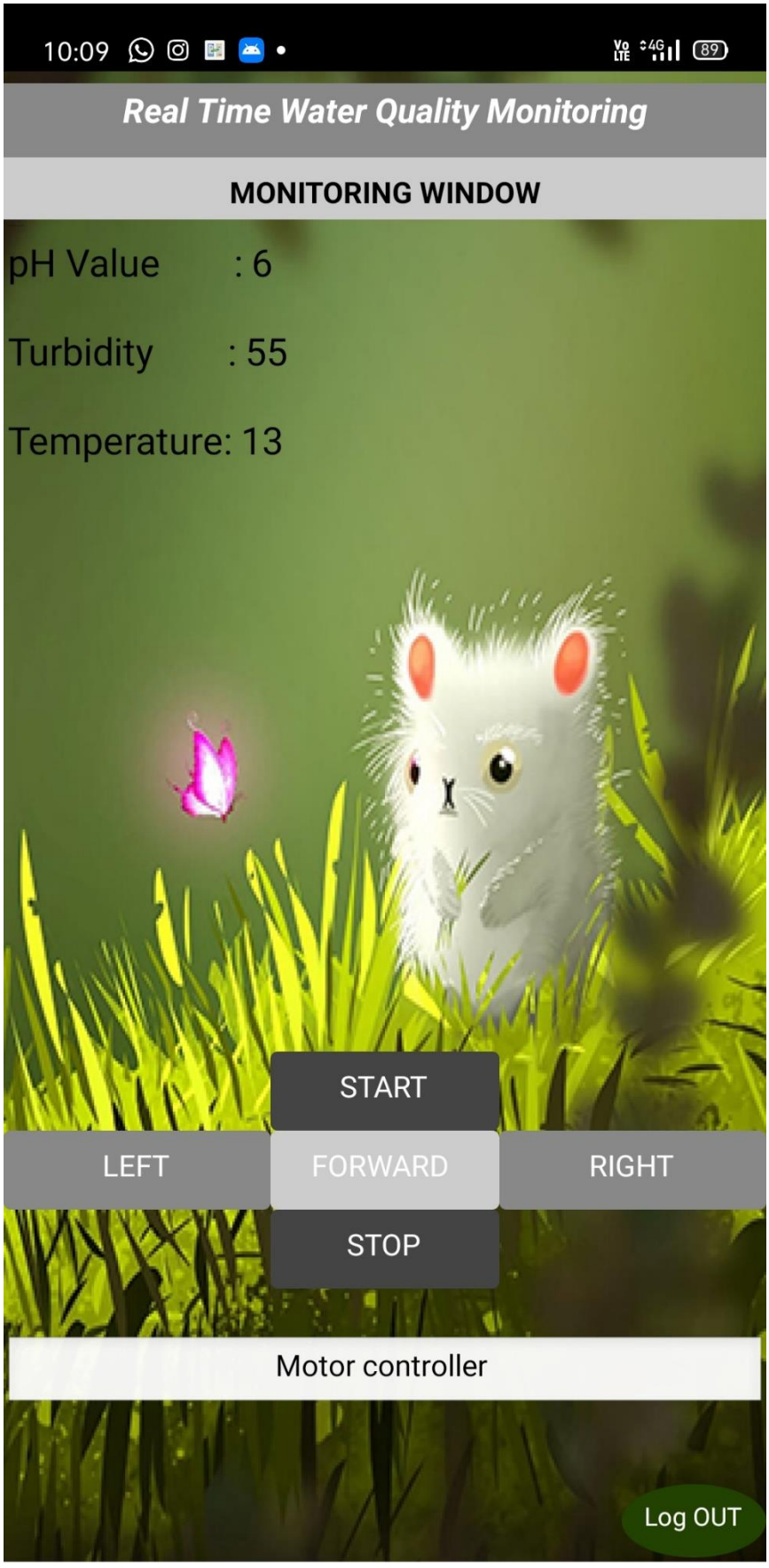
Python OUTPUT



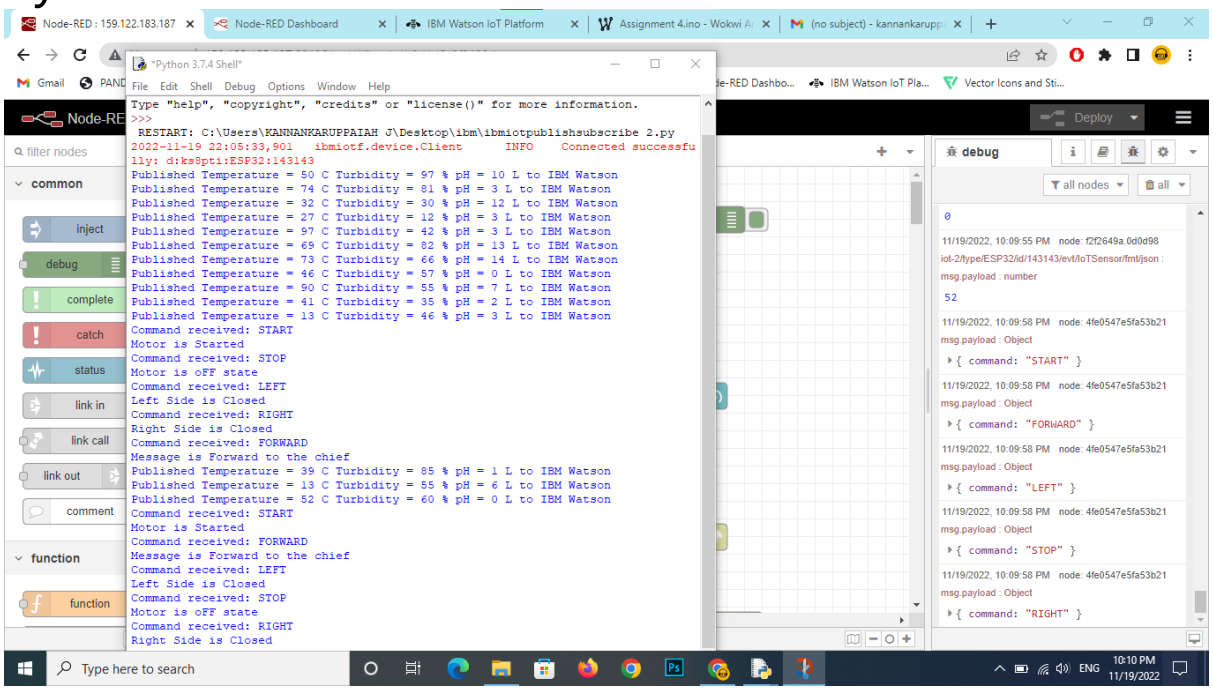
This is my mobile app screen.

Its show the pH and Turbidity values of water and temperature of motor.

When I’m clicking the control buttons in this screen the result are publish in Node-RED and python .


10:09
Real Time Water Quality Monitoring
MONITORING WINDOW
pH Value : 6
Turbidity : 55
Temperature: 13
START
LEFT
FORWARD
RIGHT
STOP
Motor controller
Log OUT

Python OUTPUT



Node-RED OUTPUT