SPRINT 3

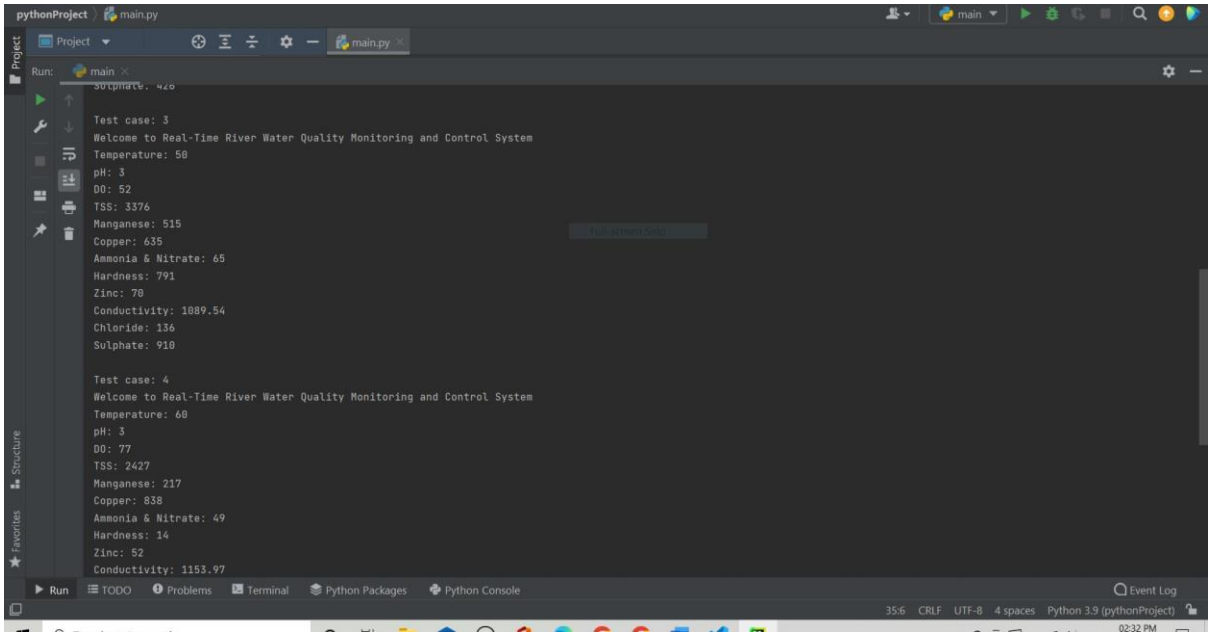
Team ID	PNT2022TMID19330
Project Name	Real-Time River Water Quality Monitoring and Control System

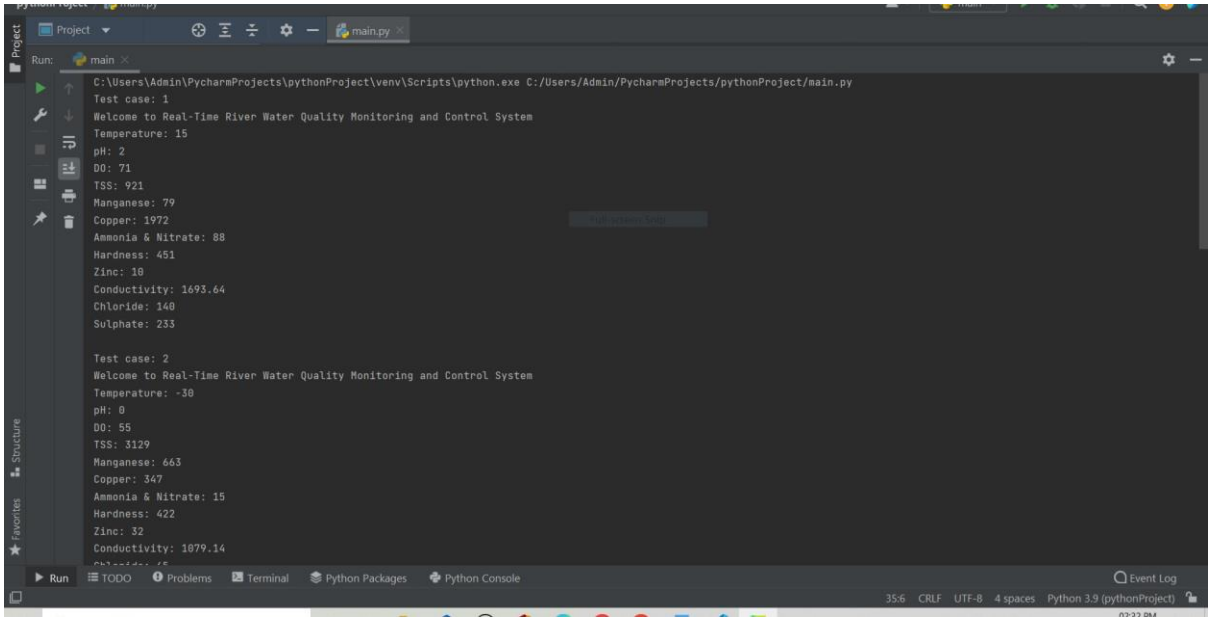
PYTHON CODE

```
#importing Random function to generate the value
import random as rand



for i in range(5):
    print("Test case:",i+1)
    print("Welcome to Real-Time River Water Quality Monitoring and Control System")
    temperature = int(rand.randint(-40,125))
    pH = int(rand.randint(0,14))
    DO = int(rand.randint(0,100))
    TSS = int(rand.randint(0,3700))
    Manganese = int(rand.randint(0,1000))
    Copper = int(rand.randint(0,2000))
    ammonia_Nitrate = int(rand.randint(0,100))
    Hardness = int(rand.randint(0,1000))
    Zinc =  int(rand.randint(0,100))
    Conductivity =  f"{float(rand.uniform(0.001,2000)):.2f}"
    Chloride = int(rand.randint(0,200))
    Sulphate = int(rand.randint(0,1000))
    #These variables store value of ramdom data to be shared to the cloud

    #printing the values
    print(
        "Temperature:", temperature,
        "\npH:", pH,
```

```
        "\nDO:", DO,
        "\nTSS:", TSS,
        "\nManganese:", Manganese,
        "\nCopper:", Copper,
        "\nAmmonia & Nitrate:",ammonia_Nitrate,
        "\nHardness:",Hardness,
        "\nZinc:", Zinc,
        "\nConductivity:", Conductivity,
        "\nChloride:", Chloride,
        "\nSulphate:", Sulphate, "\n"
    )
```

OUTPUT




Project
main.py
Run:
main
C:\Users\Admin\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/Admin/PycharmProjects/pythonProject/main.py
Test case: 1
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 15
pH: 2
DO: 71
TSS: 921
Manganese: 79
Copper: 1972
Ammonia & Nitrate: 88
Hardness: 451
Zinc: 10
Conductivity: 1693.64
Chloride: 140
Sulphate: 233
Test case: 2
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: -30
pH: 0
DO: 55
TSS: 3129
Manganese: 663
Copper: 347
Ammonia & Nitrate: 15
Hardness: 422
Zinc: 32
Conductivity: 1079.14
Run
TODO
Problems
Terminal
Python Packages
Python Console
Event Log
35:6
CRLF
UTF-8
4 spaces
Python 3.9 (pythonProject)
Structure
Favorites