SPRINT 3

PYTHON CODE

TEAM ID	PNT2022TMID06042
PROJECT TITLE	Real-Time River Water Quality Monitoring and Controlling system

PYTHON CODE

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

```python
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))
```

```python
    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"
    )
```
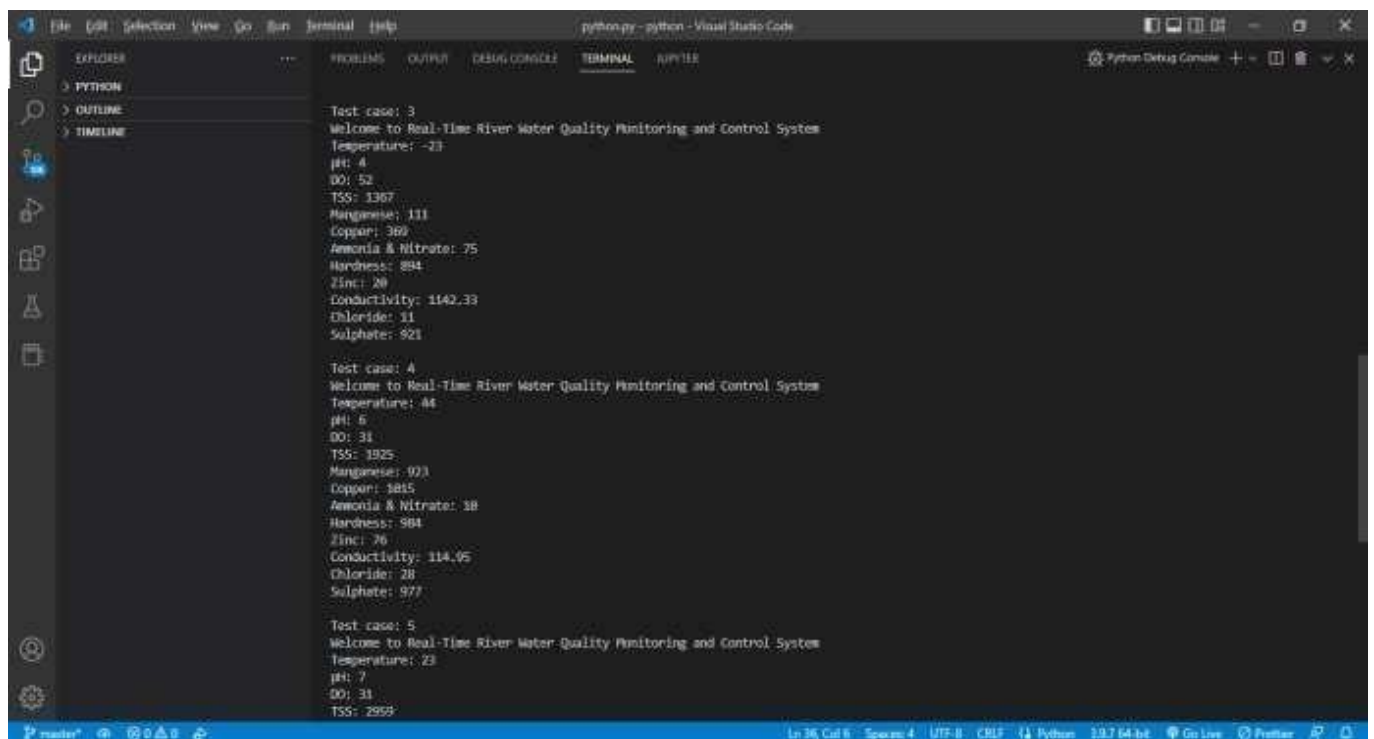
SPRINT 3

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TEAM ID	PNT2022TMID06042
PROJECT TITLE	Real-Time River Water Quality Monitoring and Controlling system

OUTPUT

```
Test case: 3
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: -23
pH: 4
DO: 52
TSS: 1307
Manganese: 111
Copper: 360
Ammonia & Nitrate: 75
Hardness: 894
Zinc: 20
Conductivity: 1142.33
Chloride: 11
Sulphate: 921

Test case: 4
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 44
pH: 6
DO: 31
TSS: 1925
Manganese: 923
Copper: 1815
Ammonia & Nitrate: 18
Hardness: 984
Zinc: 76
Conductivity: 114.95
Chloride: 28
Sulphate: 977

Test case: 5
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 23
pH: 7
DO: 31
TSS: 2959
```

```
Copper: 360
Ammonia & Nitrate: 75
Hardness: 894
Zinc: 20
Conductivity: 1142.33
Chloride: 11
Sulphate: 921

Test case: 4
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 44
pH: 6
DO: 31
TSS: 1925
Manganese: 923
Copper: 1815
Ammonia & Nitrate: 18
Hardness: 984
Zinc: 76
Conductivity: 114.95
Chloride: 28
Sulphate: 977

Test case: 5
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 23
pH: 7
DO: 31
TSS: 2959
Manganese: 180
Copper: 1429
Ammonia & Nitrate: 40
Hardness: 864
Zinc: 10
Conductivity: 318.45
Chloride: 34
Sulphate: 990
```