SPRINT 3

Team ID : PNT2022TMID21316

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

#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 sharedto
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" )
```

Test case: 1
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 80

pH: 6

DO: 5

TSS: 2881

Manganese: 499

Copper: 1057

Ammonia & Nitrate: 84

Hardness: 253

Zinc: 92

Conductivity: 434.60

Chloride: 162

Sulphate: 987

Test case: 2
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: -3

pH: 13

DO: 38

TSS: 620

Manganese: 578

Copper:1250

Ammonia & Nitrate: 95

Hardness: 380

Zinc: 81

Conductivity: 812.55

Chloride: 0

Sulphate: 225

Test case: 3
Welcome to Real-Time River Water Qual
Temperature: 21
pH: 7
DO: 53
TSS: 3023
Manganese: 131
Copper: 1797
Ammonia & Nitrate: 52
Hardness: 95
Zinc: 29
Conductivity: 1194.98
Chloride: 200
Sulphate: 16

Test case: 4
Welcome to Real-Time River Water Qua
Temperature: 118
pH: 2
DO: 9
TSS: 2330
Manganese: 699
Copper: 461
Ammonia & Nitrate: 44
Hardness: 431
Zinc: 96
Conductivity: 1892.43
Chloride: 128
Sulphate: 900

Test case: 5
Welcome to Real-Time River Water Qual
Temperature: -9
pH: 0
DO: 89
TSS: 3694
Manganese: 482
Copper: 976
Ammonia & Nitrate: 85
Hardness: 774
Zinc: 12
Conductivity: 1690.35
Chloride: 120
Sulphate: 260