DEVELOP A PYTHON SCRIPT

Date	11 November 2022
Team ID	PNT2022TMID22571
Project Name	Real – time River Water Quality Monitoring and Control System

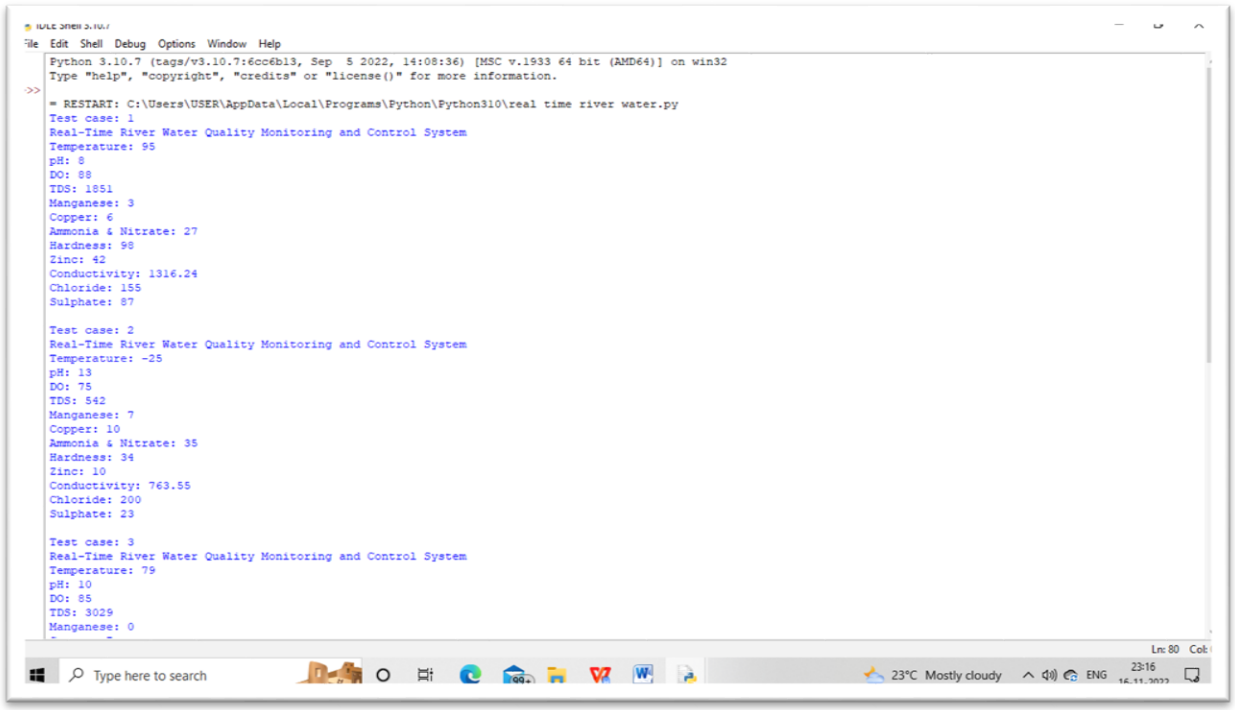
CODING

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


for i in range(5):
    print("Test case:",i+1)
    print("Real-Time River Water Quality Monitoring and Control System")
    temperature = int(rand.randint(-40,100))
    pH = int(rand.randint(0,14))
    DO = int(rand.randint(0,100))
    TDS = int(rand.randint(0,3700))
    Manganese = int(rand.randint(0,10))
    Copper = int(rand.randint(0,20))
    ammonia_Nitrate = int(rand.randint(0,100))
    Hardness = int(rand.randint(0,100))
    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(0,100))

    print(
        "Temperature:", temperature,
        "\npH:", pH,
        "\nDO:", DO,
        "\nTDS:", TDS,
        "\nManganese:", Manganese,
        "\nCopper:", Copper,
        "\nAmmonia & Nitrate:",ammonia_Nitrate,
        "\nHardness:",Hardness,
        "\nZinc:", Zinc,
        "\nConductivity:", Conductivity,
       "\nChloride:", Chloride,
        "\nSulphate:", Sulphate, "\n"
    )
```

OUTPUT


File Edit Shell Debug Options Window Help
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>
= RESTART: C:\Users\USER\AppData\Local\Programs\Python\Python310\real time river water.py
Test case: 1
Real-Time River Water Quality Monitoring and Control System
Temperature: 95
pH: 8
DO: 88
TDS: 1851
Manganese: 3
Copper: 6
Ammonia & Nitrate: 27
Hardness: 98
Zinc: 42
Conductivity: 1316.24
Chloride: 155
Sulphate: 87
Test case: 2
Real-Time River Water Quality Monitoring and Control System
Temperature: -25
pH: 13
DO: 75
TDS: 542
Manganese: 7
Copper: 10
Ammonia & Nitrate: 35
Hardness: 34
Zinc: 10
Conductivity: 763.55
Chloride: 200
Sulphate: 23
Test case: 3
Real-Time River Water Quality Monitoring and Control System
Temperature: 79
pH: 10
DO: 85
TDS: 3029
Manganese: 0
Ln: 80 Col
Type here to search
23°C Mostly cloudy
ENG
23:16