SPRINT 3

TEAM ID	PNT2022TMID17742
PROJECT NAME	Real-Time River water Quality Monitoring and Control System

CODE:-

```
import random as rand

for i in range(5):

  print("Test case:",1+1)

print("Welcome to Real-Time River Water Quality Monitoring and Control System")

temperature -int (rand.randint(-40,125)

PH DO-> int(rand.randint(0,14)) 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,200)) Sulphate int (rand.randint(0,1000))

#These variables store value of random data to be shared to the cloud

Sprinting the values

print"Temperature:", temperature,

"AnpH:", pH,

"\nD0;", 00,

"\nTSS:", TSS,

"Manganese:", Hanganese,

"\nCopper:", Copper,

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)"
f"{float(rand.uniform(0.001),

Chloride int (rand.randint(0,200)) =

Sulphate int (rand.randint(0,1000))

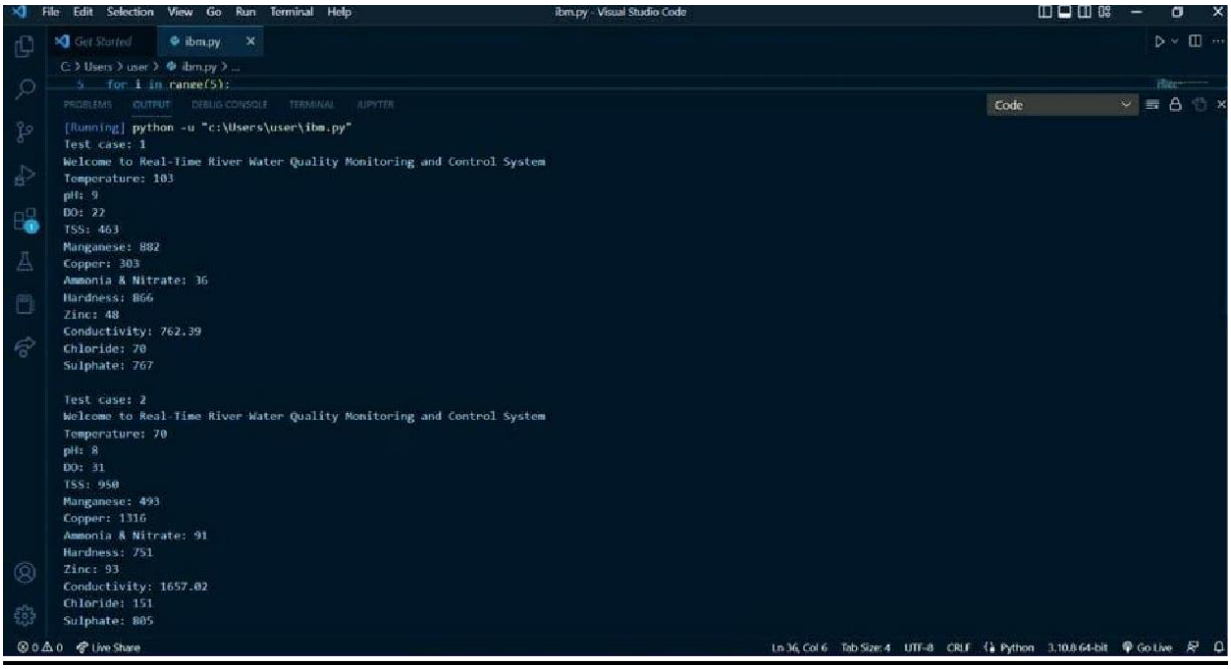
#These variables store value of ramdom data to be shared to the cloud

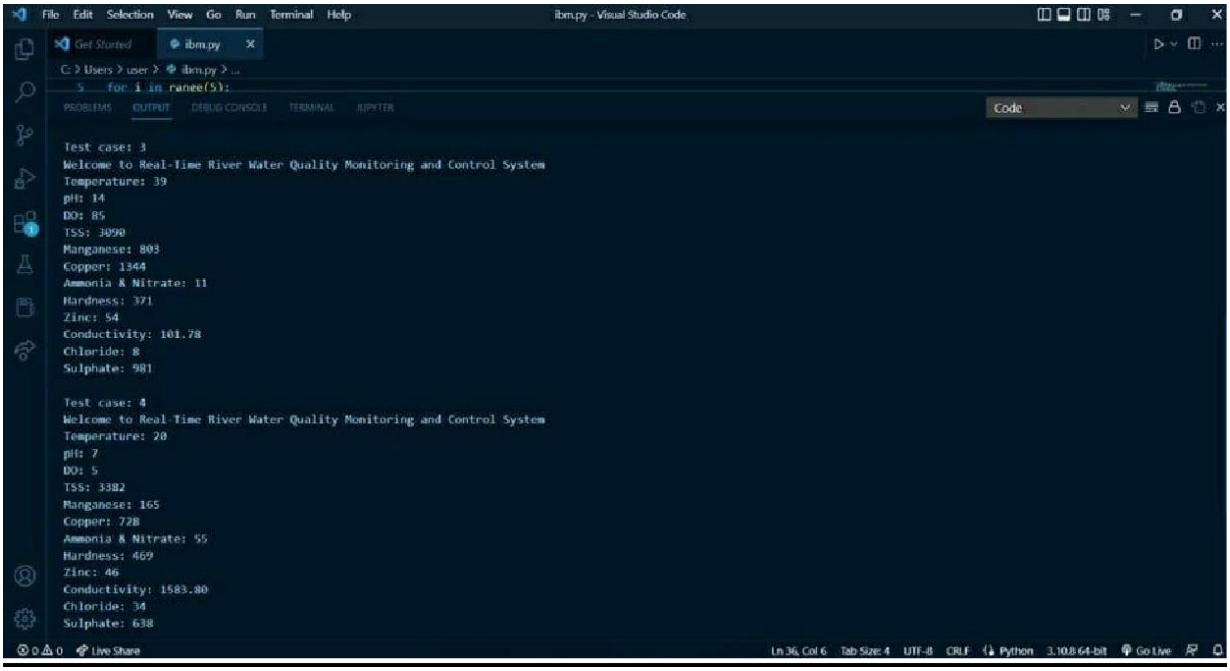
```
#printing the values

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,
"AnSulphate:", Sulphate, "\n"
```

OUTPUT :


File Edit Selection View Go Run Terminal Help
ibm.py - Visual Studio Code
Get Started
ibm.py
C: > Users > user > ibm.py > ...
for i in range(5):
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
Code
[Running] python -u "c:\Users\user\ibm.py"
Test case: 1
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 103
pH: 9
DO: 22
TSS: 463
Manganese: 882
Copper: 303
Ammonia & Nitrate: 36
Hardness: 866
Zinc: 48
Conductivity: 762.39
Chloride: 70
Sulphate: 767
Test case: 2
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 70
pH: 8
DO: 31
TSS: 950
Manganese: 493
Copper: 1316
Ammonia & Nitrate: 91
Hardness: 751
Zinc: 93
Conductivity: 1657.02
Chloride: 151
Sulphate: 805
Live Share
Ln 36, Col 6 Tab Size: 4 UTF-8 CRLF Python 3.10.0 64-bit Go Live


File Edit Selection View Go Run Terminal Help
ibm.py - Visual Studio Code
Get Started
ibm.py
C: > Users > user > ibm.py > ...
5 for i in range(5):
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
Code
Test case: 3
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 39
pH: 14
DO: 85
TSS: 3090
Manganese: 803
Copper: 1344
Ammonia & Nitrate: 11
Hardness: 371
Zinc: 54
Conductivity: 101.78
Chloride: 8
Sulphate: 981
Test case: 4
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: 20
pH: 7
DO: 5
TSS: 3382
Manganese: 165
Copper: 728
Ammonia & Nitrate: 55
Hardness: 469
Zinc: 46
Conductivity: 1583.80
Chloride: 34
Sulphate: 638
0 0 Live Share
Ln 36, Col 6 Tab Size: 4 UTF-8 CRLF Python 3.10.8 64-bit Go Live