

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
```

```
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
```

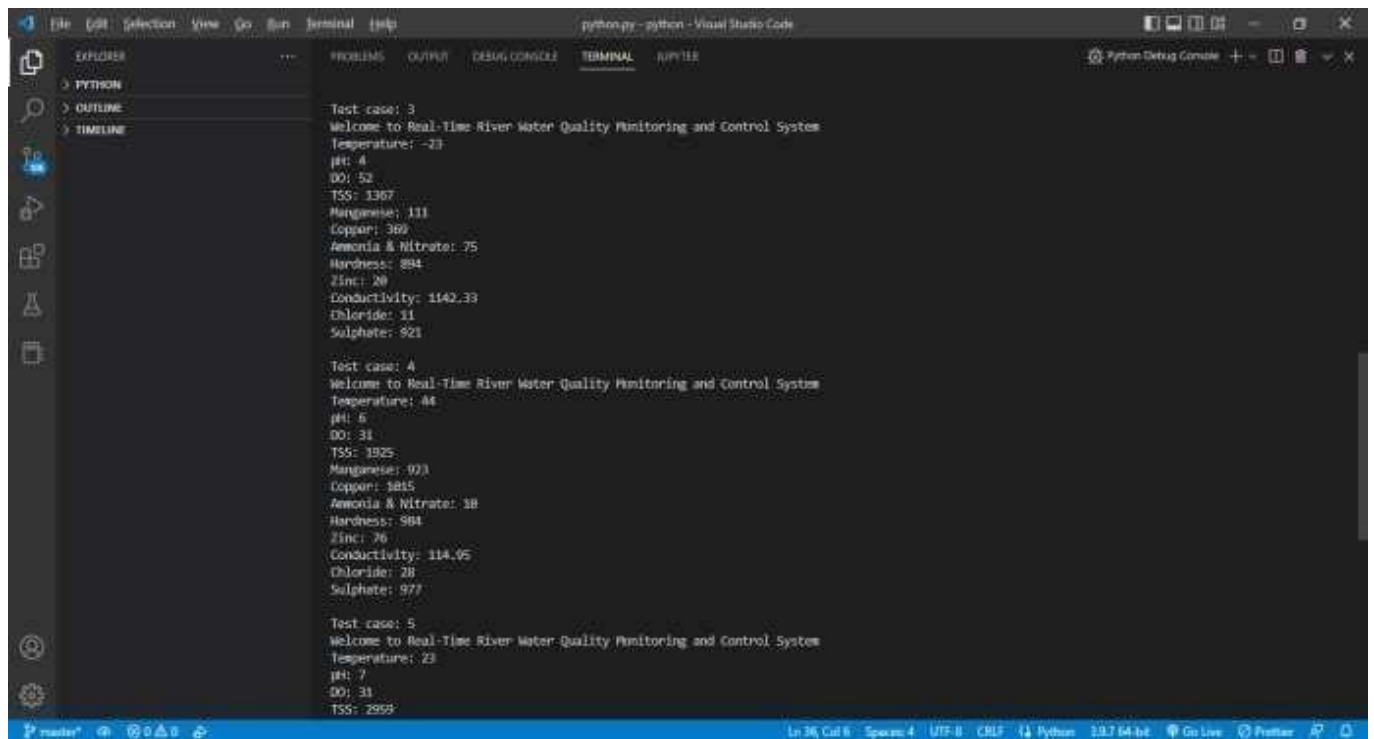
```
#printing the values    print(  
    "Temperature:", temperature,  
    "\npH:", pH,  
    "\nDO:", DO,  
    "\nTSS:", TSS,  
    "\nManganese:", Manganese,  
    "\nCopper:", Copper,  
    "\nAmmonia & Nitrate:", ammonia_Nitrate,  
    "\nHardness:", Hardness,  
    "\nZinc:", Zinc,  
    "\nConductivity:",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

SPRINT 3

PYTHON CODE

TEAM ID	PNT2022TMID19880
PROJECT TITLE	Real-Time River Water Quality Monitoring and Controlling system
DATE	Nov 2022

OUTPUT



```
python.py - python - Visual Studio Code

Test case: 3
Welcome to Real-Time River Water Quality Monitoring and Control System
Temperature: -23
pH: 4
DO: 52
TSS: 1367
Manganese: 111
Copper: 369
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: 2993
```

