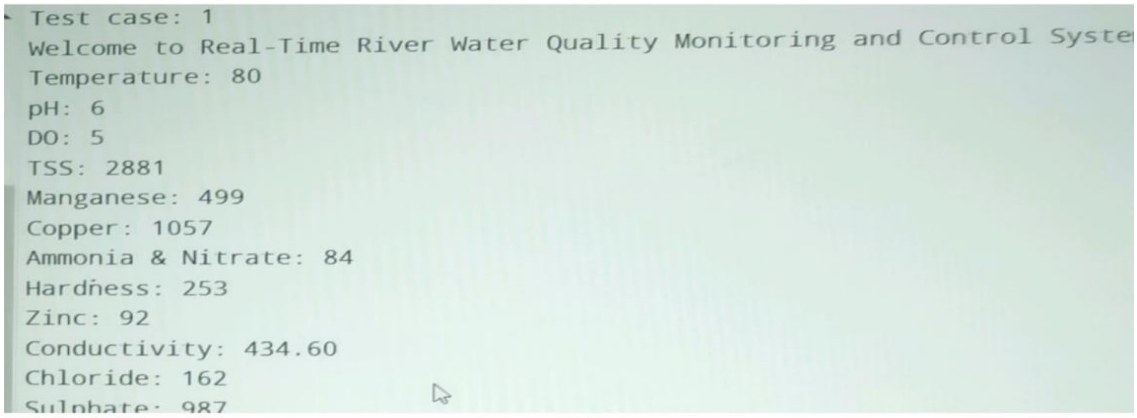
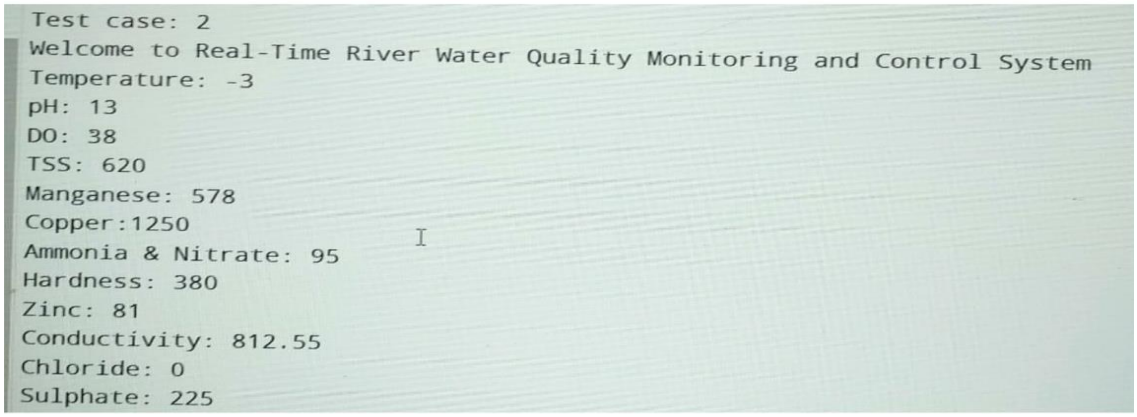
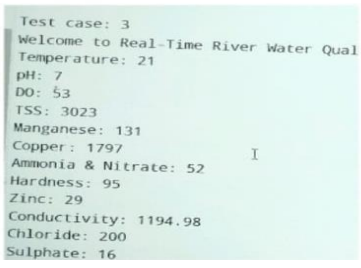
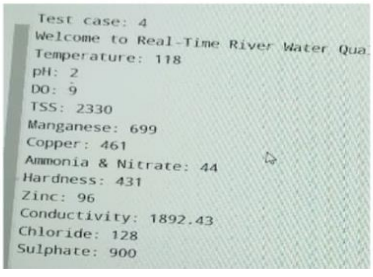
SPRINT 3

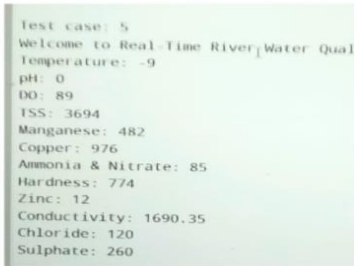
DATE	12 November 2022
TEAM ID	PNT2022TMID25057
PROJECT NAME	IOT Based Real – time River Water Quality Monitoring and Control System











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"
                 )
```