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Title: IOT Based Real time river
water qualityMonitoring

Date: 18-11-2022

Coding for our Project

```
import time.sleep
```

```
while True
```

```
    totalVoltageReading = 0
    for count in range(800):
        currentVoltageReading =
float(analogRead(rpiGpioSensorPinNum /
1023) * 5)
        totalVoltageReading =
totalVoltageReading +
currentVoltageReading
```

```
averageVoltageReading =  
totalVoltageReading / 800
```

```
roundedUpAverageVoltageReading =  
round(averageVoltageReading)
```

```
if roundedUpAverageVoltageReading <  
2.5:
```

```
    nephelometricTurbidityUnit = 3000
```

```
elif
```

```
    nephelometricTurbidityUnit = -(1120.4 *  
square(roundUpAverageVoltageReading) +  
(5742.3 * roundUpAverageVoltageReading  
- 4353.8))
```

```
lcd.clear()
```

```
lcd.setCursor(0, 0)
```

```
lcd.print(roundedUpAverageVoltageReadin  
g, "V")
```

```
lcd.setCursor(0, 1)
```

```
lcd.print(nephelometricTurbidityUnit,  
"NTU")
```

sleep(10)