

PROJECT DEVELOPMENT - DELIVERY OF SPRINT 2

Date:	14 November 2022
Team ID:	PNT2022TMID08065
Name:	Efficient Water Quality analysis & Prediction using Machine Learning.

PYTHON CODE

```
import numpy as np

import pandas as pd

import seaborn as sns

import matplotlib.pyplot
as plt

import warnings

from google.colab import
drive

drive.mount('/content/driv
e')

data=pd.read_csv('/conten
t/drive/My
Drive/water_dataX.csv',e
ncoding='ISO-8859-
1',low_memory=False)

data.shape

data.head

data.describe

data.info()

data['D.O.
(mg/l)']=pd.to_numeric(d
ata['D.O.
(mg/l)'],errors='coerce')

data['PH']=pd.to_numeric
(data['PH'],errors='coerce'
)

data['B.O.D.
(mg/l)']=pd.to_numeric(d
ata['B.O.D.
(mg/l)'],errors='coerce')

data['CONDUCTIVITY
(µmhos/cm)']=pd.to_num
eric(data['CONDUCTIVI
TY
(µmhos/cm)'],errors='coer
ce')
```

```
data.dtypes
```

```
data['NITRATENAN N+NITRITENANN  
(mg/l)']=pd.to_numeric(d  
ata['NITRATENAN N+NITRITENANN  
(mg/l)'],errors='coerce')
```

```
data['TOTAL  
COLIFORM  
(MPN/100ml)Mean']=pd.t  
o_numeric(data['TOTAL  
COLIFORM  
(MPN/100ml)Mean'],erro  
rs='coerce')
```

```
data.dtypes
```

```
# Data visualization  
Sns.catplot(x='wbdo',  
y='wec'  
,kind='bar',data=data)
```

Output:

