

Team ID	PNT2022TMID54173
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning

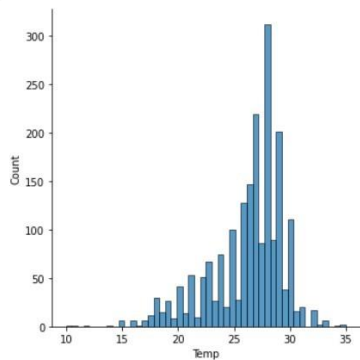
Data Visualization

Data visualization

univariate Analysis

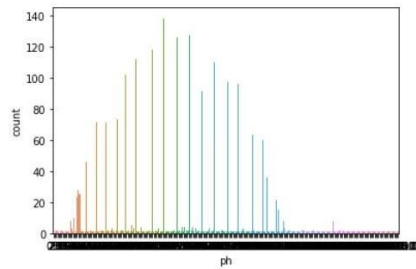
a)displot

```
In [355]: sns.displot(data.Temp)
plt.show()
```



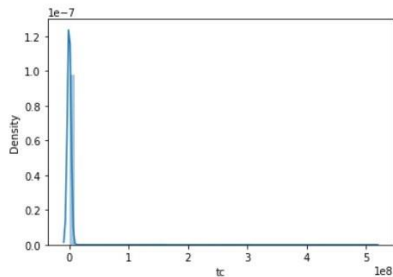
b)Countplot

```
In [360]: sns.countplot(data.ph)
plt.show()
```



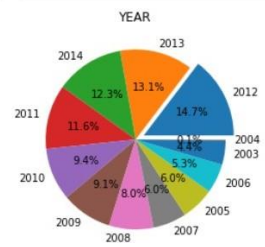
c)Distplot

```
In [365]: sns.distplot(data.tc)
plt.show()
```



d)Pie chart

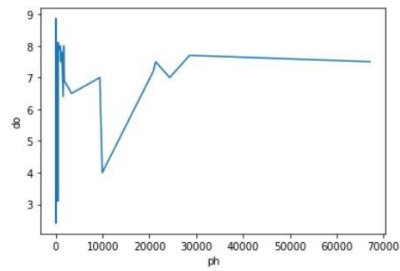
```
In [369]: plt.pie(data.year.value_counts(),[0.1,0,0,0,0,0,0,0,0,0,0,0],labels=[2012,2013,2014,2011,2010,2009,2008,2007,2005,2006,2003,2004],
plt.title('YEAR')
plt.show()
```



Bivariate Analysis

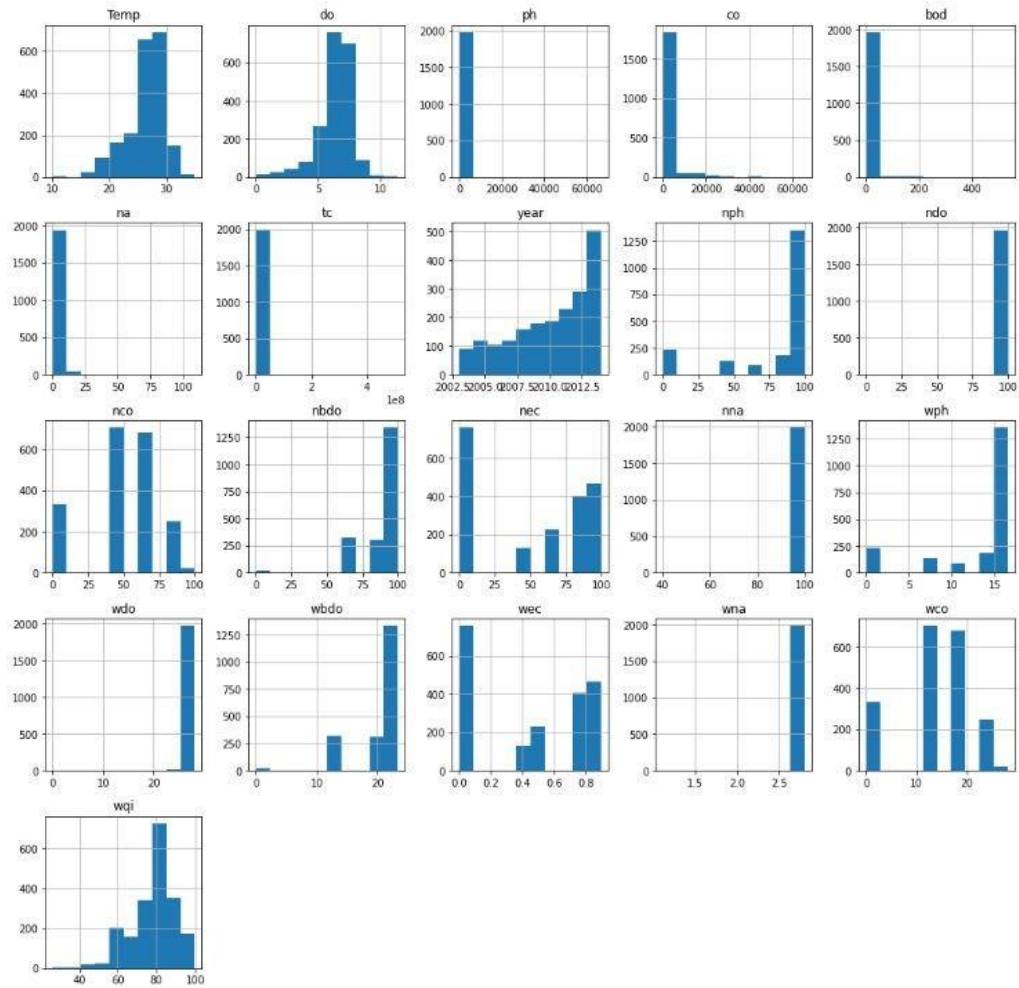
a)Line plot

```
In [374]: sns.lineplot(data.ph,data.do)
plt.show()
```



Multivariate analysis

```
In [395]: data.hist(figsize=(17,17))
plt.show()
```



b)Scatter plot

```
In [383]: sns.scatterplot(data.ph,data.bod)
plt.show()
```

