

Team ID	PNT2022TMID51603
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning

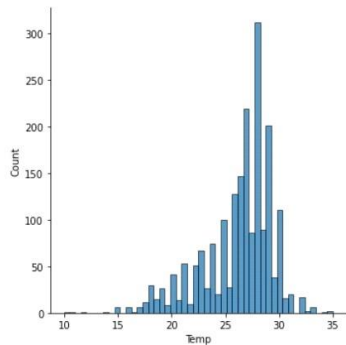
## Data Visualization

### Data visualization

#### univariate Analysis

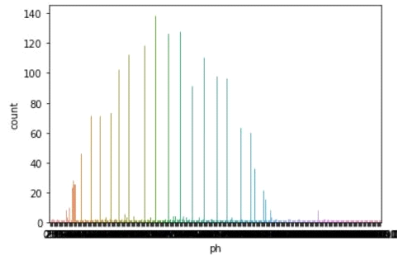
##### a)displot

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



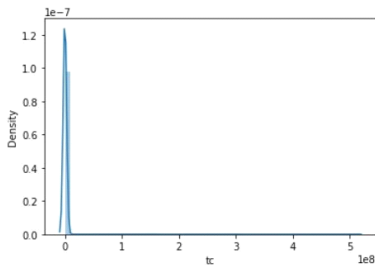
##### b)Countplot

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



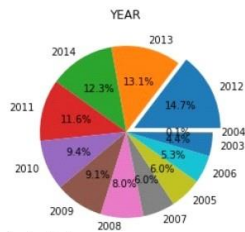
##### c)Distplot

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



d)Pie chart

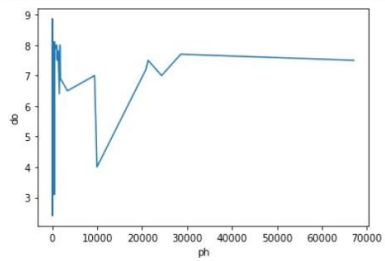
```
In [369]: plt.pie(data.year.value_counts(), [0.1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0], labels=[2012, 2013, 2014, 2011, 2010, 2009, 2008, 2007, 2005, 2006, 2003, 2004],  
plt.title('YEAR')  
plt.show()
```



#### Bivariate Analysis

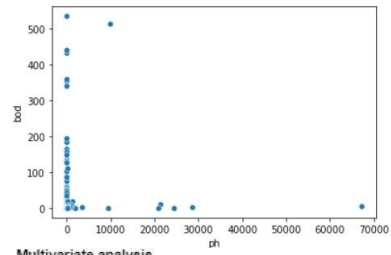
a)Line plot

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



b)Scatter plot

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



Multivariate analysis

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

