| TEAM ID | PNT2022TMID11378 |
|--------------|--|
| PROJECT NAME | Efficient Water Quality Analysis and Prediction using Machine Learning |

Handling missing values 2:

```
In [10]: data.dtypes
Out[10]: STATION CODE
                                            object
                                            object
         LOCATIONS
                                            object
         STATE
                                            object
         Temp
                                            object
         D.O. (mg/1)
                                            object
         CONDUCTIVITY (µmhos/cm)
                                            object
         B.O.D. (mg/l)
                                            object
         NITRATENAN N+ NITRITENANN (mg/l)
                                            object
         FECAL COLIFORM (MPN/100ml)
                                            object
         TOTAL COLIFORM (MPN/100ml)Mean
                                            object
                                             int64
         year
         dtype: object
```

```
In [18]: data['Temp'].fillna(data['Temp'].mean(),inplace=True)

data['D.O. (mg/l)'].fillna(data['D.O. (mg/l)'].mean(),inplace=True)

data['PH'].fillna(data['PH'].mean(),inplace=True)

data['CONDUCTIVITY (µmhos/cm)'].fillna(data['CONDUCTIVITY (µmhos/cm)'].mean(),inplace=True)

data['B.O.D. (mg/l)'].fillna(data['B.O.D. (mg/l)'].mean(),inplace=True)

data['NITRATENAN N+ NITRITENANN (mg/l)'].fillna(data['NITRATENAN N+ NITRITENANN (mg/l)'].mean(),inplace=True)

data['TOTAL COLIFORM (MPN/100ml)Mean'].fillna(data['TOTAL COLIFORM (MPN/100ml)Mean'].mean(),inplace=True)
```

| In [338]: | data.dtypes | | |
|-----------|----------------------------------|---------|---------------|
| Out[338]: | STATION CODE | object | |
| | LOCATIONS | object | |
| | STATE | object | |
| | Temp | float64 | |
| | D.O. (mg/l) | float64 | |
| | PH | float64 | |
| | CONDUCTIVITY (µmhos/cm) | float64 | |
| | B.O.D. (mg/l) | float64 | |
| | NITRATENAN N+ NITRITENANN (mg/l) | float64 | |
| | FECAL COLIFORM (MPN/100ml) | object | |
| | TOTAL COLIFORM (MPN/100ml)Mean | float64 | |
| | year | int64 | |
| | dtype: object | | |
| In [340]: | data.isnull().sum() | | |
| Out[340]: | STATION CODE | 0 | |
| | LOCATIONS | e | |
| | STATE | e | |
| | Temp | 92 | |
| | D.O. (mg/l) | 31 | |
| | PH | 8 | |
| | CONDUCTIVITY (µmhos/cm) | 25 | |
| | B.O.D. (mg/l) | 43 | |
| | NITRATENAN N+ NITRITENANN (mg/l) | 225 | |
| | FECAL COLIFORM (MPN/100ml) | e | |
| | TOTAL COLIFORM (MPN/100ml)Mean | 132 | |
| | year | 0 | Activate V |
| | dtype: int64 | NSE. | |
| | | | Go to Setting |