

PNT2022TMID21280_Efficient Water Quality Analysis & Prediction using Machine Learning.

Handling Missing Values-2:

```
In [9]: data.dtypes
```

```
Out[9]: STATION CODE      object
        LOCATIONS        object
        STATE            object
        Temp              object
        D.O. (mg/l)       object
        PH                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
        year              int64
        dtype: object
```

```
In [10]: data['Temp']=pd.to_numeric(data['Temp'],errors='coerce')
data['D.O. (mg/l)']=pd.to_numeric(data['D.O. (mg/l)'],errors='coerce')
data['PH']=pd.to_numeric(data['PH'],errors='coerce')
data['CONDUCTIVITY (µmhos/cm)']=pd.to_numeric(data['CONDUCTIVITY (µmhos/cm)'],errors='coerce')
data['B.O.D. (mg/l)']=pd.to_numeric(data['B.O.D. (mg/l)'],errors='coerce')
data['NITRATENAN N+ NITRITENANN (mg/l)']=pd.to_numeric(data['NITRATENAN N+ NITRITENANN (mg/l)'],errors='coerce')
data['TOTAL COLIFORM (MPN/100ml)Mean']=pd.to_numeric(data['TOTAL COLIFORM (MPN/100ml)Mean'],errors='coerce')
data.dtypes
```

```
Out[10]: 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 [11]: data.isnull().sum()
```

```
Out[11]: STATION CODE          0
          LOCATIONS            0
          STATE                0
          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) 0
          TOTAL COLIFORM (MPN/100ml)Mean 132
          year                 0
          dtype: int64
```