

Team ID	PNT2022TMID15657
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning

ANALYSING THE DATA:

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In [330]: data.head()
Out[330]:
   STATION CODE LOCATIONS STATE Temp D.O. (mg/l) PH CONDUCTIVITY (µmhos/cm) B.O.D. (mg/l) NITRATENAN N+ NITRITENANN (mg/l) FECAL COLIFORM (MPN/100ml) TOTAL COLIFORM (MPN/100ml)Mean year
0 1393 DAMANGANGA AT D/S OF MADHUBAN, DAMAN DAMAN & DIU 30.6 6.7 7.5 203 NAN 0.1 11 27 2014
1 1399 ZUARI AT D/S OF PT. WHERE KUMBARJRIA CANAL JOI... GOA 29.8 5.7 7.2 189 2 0.2 4953 8391 2014
2 1475 ZUARI AT PANCHAWADI GOA 29.5 6.3 6.9 179 1.7 0.1 3243 5330 2014
3 3181 RIVER ZUARI AT BORIM BRIDGE GOA 29.7 5.8 6.9 64 3.8 0.5 5382 8443 2014
4 3182 RIVER ZUARI AT MARCAIM JETTY GOA 29.5 5.8 7.3 83 1.9 0.4 3428 5500 2014

In [331]: data.describe()
Out[331]:
   year
count 1991.000000
mean 2010.038172
std 3.057333
min 2003.000000
25% 2008.000000
50% 2011.000000
75% 2013.000000
max 2014.000000

In [332]: data.info()
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1991 entries, 0 to 1990
Data columns (total 12 columns):
#   Column                                Non-Null Count  Dtype
---  ---                                ---
0   STATION CODE                          1991 non-null  object
1   LOCATIONS                            1991 non-null  object
2   STATE                                1991 non-null  object
3   Temp                                1991 non-null  object
4   D.O. (mg/l)                          1991 non-null  object
5   PH                                    1991 non-null  object
6   CONDUCTIVITY (µmhos/cm)              1991 non-null  object
7   B.O.D. (mg/l)                        1991 non-null  object
8   NITRATENAN N+ NITRITENANN (mg/l)    1991 non-null  object
9   FECAL COLIFORM (MPN/100ml)          1991 non-null  object
10  TOTAL COLIFORM (MPN/100ml)Mean       1991 non-null  object
11  year                                 1991 non-null  int64
dtypes: int64(1), object(11)
memory usage: 186.8+ KB

```