

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

ANALYSING THE DATA:

In [5]: data.head()

Out[5]:

	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
0	1393	DAMANGANGA AT D/S OF MADHUBAN, DAMAN	DAMAN & DIU	30.6	6.7	7.5	203	NAN	0.1	11	27
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
2	1475	ZUARI AT PANCHAWADI	GOA	29.5	6.3	6.9	179	1.7	0.1	3243	5330
3	3181	RIVER ZUARI AT BORIM BRIDGE	GOA	29.7	5.8	6.9	64	3.8	0.5	5382	8443
4	3182	RIVER ZUARI AT MARCAIM JETTY	GOA	29.5	5.8	7.3	83	1.9	0.4	3428	5500

In [6]: data.describe()

Out[6]:

	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 [7]: 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
```