

Here, The Weather Dataset is a time-series data set with per-hour information about the weather conditions at a particular location. It records Temperature, Dew Point Temperature, Relative Humidity, Wind Speed, Visibility, Pressure, and Conditions

This data is available as a CSV file. Analyze this data set using the Pandas DataFrame

- Q.) Find all the unique 'Wind Speed' values in the data.
- Q.) Find the number of times when the 'Weather is exactly Clear'.
- Q.) Find the number of times when the 'Wind Speed was exactly 4 km/h'.
- Q.) Rename the column name 'Weather' of the dataframe' to 'Weather Condition'.
- Q.) What is the Variance of 'Relative Humidity' in this data ?
- Q.) Find out all the Null Values in the data.
- Q.) What is the mean 'Visibility'?
- Q.) Find all instances when 'Snow' was recorded.
- Q.) Find all instances when 'Wind Speed is above 24' and 'Visibility is 25'.
- Q.) What is the Mean value of each column against each Weather condition?
- Q.) What is the Minimum & Maximum value of each column against each weather condition?
- Q.) Find all instances when 'Weather is Clear' or 'Visibility' is above 40.

Use following commands in this project.

- *head() - It shows the first N rows in the data (by default, N=5).
- * shape - It shows the total no. of rows and no. of columns of the dataframe
- * index - This attribute provides the index of the dataframe
- * columns - It shows the name of each column
- *dtypes - It shows the data-type of each column



* `unique()` - In a column, it shows all the unique values. It can be applied on a single column only, not on the whole dataframe.

* `nunique()` - It shows the total no. of unique values in each column. It can be applied on a single column as well as on the whole dataframe.

* `count` - It shows the total no. of non-null values in each column. It can be applied on a single column as well as on the whole dataframe.

* `value_counts` - In a column, it shows all the unique values with their count. It can be applied on a single column only.

* `info()` - Provides basic information about the dataframe.

