

```
In [1]: greeting = "Assalam-o-Alaikum!"
print(greeting)
```

Assalam-o-Alaikum!

Import Libraries

```
In [2]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

Import Dataset

```
In [5]: df = pd.read_csv("1. Weather Data.csv")
df.head()
```

```
Out[5]:
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_kPa	Weather
0	1/1/2012 0:00	-1.8	-3.9	86	4	8.0	101.24	Fog
1	1/1/2012 1:00	-1.8	-3.7	87	4	8.0	101.24	Fog
2	1/1/2012 2:00	-1.8	-3.4	89	7	4.0	101.26	Freezing Drizzle,Fog
3	1/1/2012 3:00	-1.5	-3.2	88	6	4.0	101.27	Freezing Drizzle,Fog
4	1/1/2012 4:00	-1.5	-3.3	88	7	4.8	101.23	Fog

```
In [6]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 8784 entries, 0 to 8783
Data columns (total 8 columns):
#   Column                Non-Null Count  Dtype
---  -
0   Date/Time              8784 non-null   object
1   Temp_C                 8784 non-null   float64
2   Dew Point Temp_C       8784 non-null   float64
3   Rel Hum_%              8784 non-null   int64
4   Wind Speed_km/h        8784 non-null   int64
5   Visibility_km           8784 non-null   float64
6   Press_kPa              8784 non-null   float64
7   Weather                8784 non-null   object
dtypes: float64(4), int64(2), object(2)
memory usage: 549.1+ KB
```

```
In [10]: df.shape
```

```
Out[10]: (8784, 8)
```

```
In [11]: df.index
```

```
Out[11]: RangeIndex(start=0, stop=8784, step=1)
```

```
In [12]: df.columns
```

```
Out[12]: Index(['Date/Time', 'Temp_C', 'Dew Point Temp_C', 'Rel Hum %',
              'Wind Speed_km/h', 'Visibility_km', 'Press_kPa', 'Weather'],
              dtype='object')
```

```
In [13]: df["Weather"].unique()
```

```
Out[13]: array(['Fog', 'Freezing Drizzle,Fog', 'Mostly Cloudy', 'Cloudy', 'Rain',
              'Rain Showers', 'Mainly Clear', 'Snow Showers', 'Snow', 'Clear',
              'Freezing Rain,Fog', 'Freezing Rain', 'Freezing Drizzle',
              'Rain,Snow', 'Moderate Snow', 'Freezing Drizzle,Snow',
              'Freezing Rain,Snow Grains', 'Snow,Blowing Snow', 'Freezing Fog',
              'Haze', 'Rain,Fog', 'Drizzle,Fog', 'Drizzle',
              'Freezing Drizzle,Haze', 'Freezing Rain,Haze', 'Snow,Haze',
              'Snow,Fog', 'Snow,Ice Pellets', 'Rain,Haze', 'Thunderstorms,Rain',
              'Thunderstorms,Rain Showers', 'Thunderstorms,Heavy Rain Showers',
              'Thunderstorms,Rain Showers,Fog', 'Thunderstorms',
              'Thunderstorms,Rain,Fog',
              'Thunderstorms,Moderate Rain Showers,Fog', 'Rain Showers,Fog',
              'Rain Showers,Snow Showers', 'Snow Pellets', 'Rain,Snow,Fog',
              'Moderate Rain,Fog', 'Freezing Rain,Ice Pellets,Fog',
              'Drizzle,Ice Pellets,Fog', 'Drizzle,Snow', 'Rain,Ice Pellets',
              'Drizzle,Snow,Fog', 'Rain,Snow Grains', 'Rain,Snow,Ice Pellets',
              'Snow Showers,Fog', 'Moderate Snow,Blowing Snow'], dtype=object)
```

```
In [15]: df.nunique()
```

```
Out[15]: Date/Time      8784
Temp_C      533
Dew Point Temp_C  489
Rel Hum_%    83
Wind Speed_km/h  34
Visibility_km  24
Press_kPa    518
Weather      50
dtype: int64
```

Find Unique Values of Column "Wind Speed_km/h".

```
In [19]: df["Wind Speed_km/h"].nunique()
```

```
Out[19]: 34
```

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