```
In [3]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [5]: data=pd.read_csv("data_clean.csv")
 data

Out[5]:

	Unnamed: 0	Ozone	Solar.R	Wind	Temp C	Month	Day	Year	Temp	Weather
0	1	41.0	190.0	7.4	67	5	1	2010	67	S
1	2	36.0	118.0	8.0	72	5	2	2010	72	С
2	3	12.0	149.0	12.6	74	5	3	2010	74	PS
3	4	18.0	313.0	11.5	62	5	4	2010	62	S
4	5	NaN	NaN	14.3	56	5	5	2010	56	S
153	154	41.0	190.0	7.4	67	5	1	2010	67	С
154	155	30.0	193.0	6.9	70	9	26	2010	70	PS
155	156	NaN	145.0	13.2	77	9	27	2010	77	S
156	157	14.0	191.0	14.3	75	9	28	2010	75	S
157	158	18.0	131.0	8.0	76	9	29	2010	76	С

158 rows × 10 columns

In [6]: data.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 158 entries, 0 to 157
Data columns (total 10 columns):

#	Column	Non-Null Count	Dtype
0	Unnamed: 0	158 non-null	int64
1	Ozone	120 non-null	float64
2	Solar.R	151 non-null	float64
3	Wind	158 non-null	float64
4	Temp C	158 non-null	object
5	Month	158 non-null	object
6	Day	158 non-null	int64
7	Year	158 non-null	int64
8	Temp	158 non-null	int64
9	Weather	155 non-null	object
dtyp	es: float64(3), int64(4), ob	ject(3)

memory usage: 12.5+ KB

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```
In [7]:
          print(type(data))
          print(data.shape)
          <class 'pandas.core.frame.DataFrame'>
          (158, 10)
 In [8]:
          data.shape
Out[8]: (158, 10)
 In [9]:
          data.dtypes
 Out[9]: Unnamed: 0
                           int64
          Ozone
                         float64
          Solar.R
                         float64
                         float64
          Wind
          Temp C
                          object
          Month
                          object
          Day
                           int64
          Year
                           int64
          Temp
                           int64
                          object
          Weather
          dtype: object
In [10]: data.describe
Out[10]: <bound method NDFrame.describe of</pre>
                                                    Unnamed: 0 Ozone Solar.R Wind Temp
          C Month Day Year Temp Weather
                                                                                         S
          0
                         1
                             41.0
                                      190.0
                                              7.4
                                                       67
                                                              5
                                                                   1
                                                                       2010
                                                                               67
          1
                                                                                         C
                         2
                             36.0
                                      118.0
                                              8.0
                                                       72
                                                              5
                                                                   2
                                                                       2010
                                                                               72
          2
                                      149.0
                                                                                        PS
                         3
                             12.0
                                             12.6
                                                       74
                                                              5
                                                                   3
                                                                       2010
                                                                               74
          3
                         4
                                                       62
                                                              5
                                                                      2010
                                                                                         S
                             18.0
                                      313.0
                                             11.5
                                                                   4
                                                                               62
                                                                                         S
          4
                         5
                                            14.3
                                                              5
                                                                       2010
                                                                               56
                              NaN
                                       NaN
                                                       56
                                                                   5
                              . . .
                                                                        . . .
                                              . . .
                                                                               . . .
          153
                      154
                             41.0
                                      190.0
                                              7.4
                                                              5
                                                                       2010
                                                                                         C
                                                       67
                                                                   1
                                                                               67
                                                              9
                                                                                        PS
          154
                      155
                             30.0
                                      193.0
                                              6.9
                                                       70
                                                                  26
                                                                       2010
                                                                               70
                                                              9
                                                                                         S
                                      145.0
                                                       77
                                                                  27
                                                                       2010
                                                                               77
          155
                      156
                              NaN
                                            13.2
                      157
                                                       75
                                                              9
                                                                  28
                                                                       2010
                                                                               75
                                                                                         S
          156
                             14.0
                                      191.0
                                             14.3
                                                                                         C
          157
                      158
                             18.0
                                      131.0
                                              8.0
                                                       76
                                                              9
                                                                   29
                                                                       2010
                                                                               76
          [158 rows x 10 columns]>
 In [ ]: data1=data.drop(["Unnamed:0",])
```

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```
data['Month']=pd.to_numeric(data['Month'],errors='coerce')
In [15]:
         data.info()
         <class 'pandas.core.frame.DataFrame'>
         RangeIndex: 158 entries, 0 to 157
         Data columns (total 10 columns):
              Column
                          Non-Null Count Dtype
              Unnamed: 0 158 non-null
                                          int64
              0zone
                          120 non-null
                                          float64
          2
              Solar.R
                          151 non-null
                                          float64
          3
              Wind
                         158 non-null
                                          float64
          4
              Temp C
                          158 non-null
                                          object
          5
              Month
                          157 non-null
                                          float64
          6
              Day
                          158 non-null
                                          int64
          7
              Year
                         158 non-null
                                          int64
          8
                          158 non-null
                                          int64
              Temp
          9
              Weather
                          155 non-null
                                          object
         dtypes: float64(4), int64(4), object(2)
         memory usage: 12.5+ KB
         data[data.duplicated()]
Out[17]:
           Unnamed: 0 Ozone Solar.R Wind Temp C Month Day Year Temp Weather
In [ ]:
```

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