```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
import plotly.express as px

df=pd.read_csv("whetherdata.csv")

df.head()
```

```
   Unnamed: 0        Date  Temperature  Precipitation  WindSpeed
Humidity  \
0           0  2023-01-01     1.898072       9.579802  13.848161
94.469492
1           1  2023-01-02    21.529312       7.025833   0.351209
86.798434
2           2  2023-01-03     5.343090       4.026146  11.647030
89.851149
3           3  2023-01-04    29.363569       1.635058   9.998066
97.058890
4           4  2023-01-05    11.467011       5.976010  16.626051
15.157318

   AirQuality
0   11.717932
1    2.478491
2   31.273107
3   69.885303
4   34.799922
```

```
df.tail()
```

```
     Unnamed: 0        Date  Temperature  Precipitation  WindSpeed
Humidity  \
360         360  2023-12-27    24.849144       6.111679  13.979521
58.057830
361         361  2023-12-28    24.203969       9.657664   2.605847
66.022636
362         362  2023-12-29    29.551684       9.796906  18.771017
96.343895
363         363  2023-12-30    18.347636       9.136469   4.101058
10.057481
364         364  2023-12-31    16.648958       4.663300   6.821018
16.729123

     AirQuality
360   85.863829
361   29.120873
362   43.813697
363   81.452333
364   55.551078
```

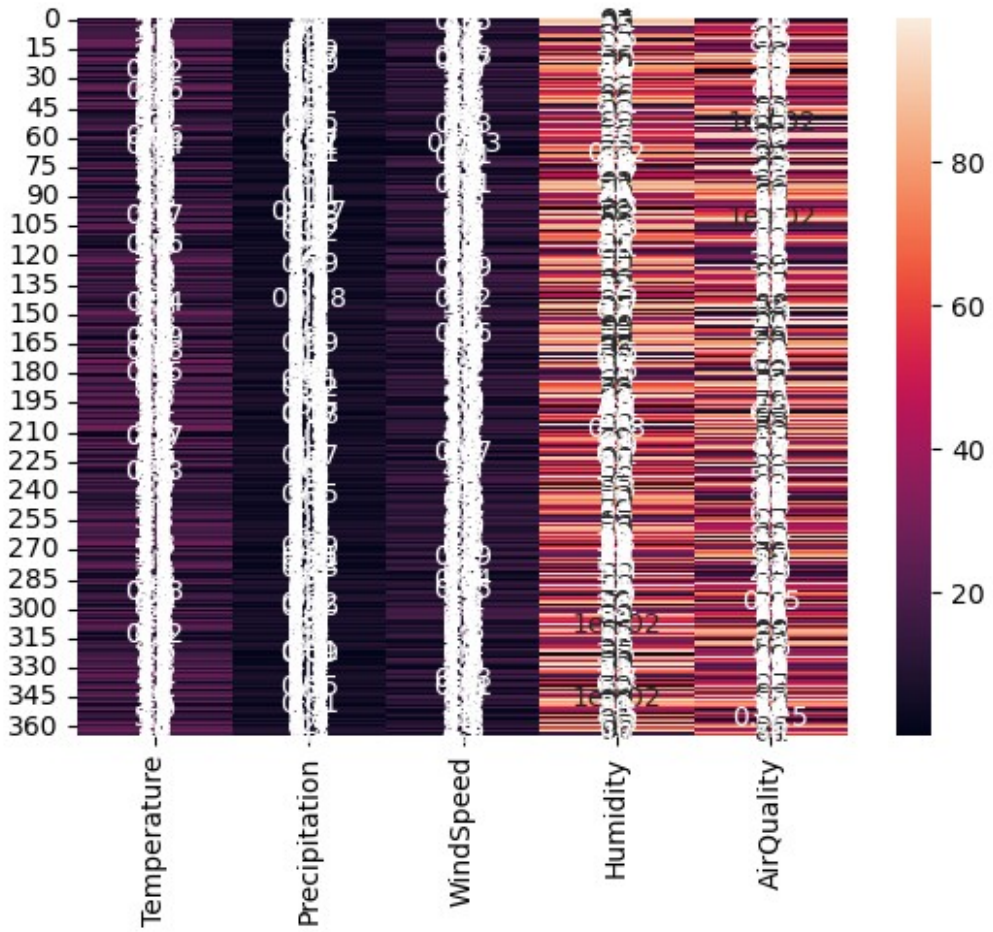
```
lst=['Unnamed: 0','Date']
data=df.drop(lst,axis=1)

data.shape
```

```
(365, 5)
```

```
data.describe()
```

	Temperature	Precipitation	WindSpeed	Humidity	AirQuality
count	365.000000	365.000000	365.000000	365.000000	365.000000
mean	15.158568	5.076414	10.261049	52.644003	47.700990
std	8.677842	2.884492	5.866976	28.862079	29.118177
min	0.119154	0.058347	0.023253	0.118759	0.024988
25%	7.803735	2.658735	5.310248	30.414790	22.193381
50%	15.841242	5.077923	10.177617	53.002905	44.559242
75%	22.017053	7.666688	15.560158	77.951121	73.402204
max	29.930094	9.995343	19.981496	99.883985	99.911092

```
sns.heatmap(data,annot=True)
plt.show()
```



```
correlation_matrix = data.corr()
plt.figure(figsize=(10, 8))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm',
linewidths=.5)
plt.title('Correlation Heatmap')
plt.show()
```