```
import pandas as pd
```

```
data = pd.read_csv('/content/sample_data/1. Weather Data.csv')
```

```
data
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
0	1/1/2012 0:00	-1.8	-3.9	86	4	8.0	101.
1	1/1/2012 1:00	-1.8	-3.7	87	4	8.0	101.
2	1/1/2012 2:00	-1.8	-3.4	89	7	4.0	101.
3	1/1/2012 3:00	-1.5	-3.2	88	6	4.0	101.
4	1/1/2012 4:00	-1.5	-3.3	88	7	4.8	101.
...	...	...	...	...	...	...	
8779	12/31/2012 19:00	0.1	-2.7	81	30	9.7	100.

How to Analyze DataFrame?

.head()

it shows the first n rows in the data.(by defult n=5)

```
data.head()
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_kPa
0	1/1/2012 0:00	-1.8	-3.9	86	4	8.0	101.24
1	1/1/2012	-1.8	-3.7	87	4	8.0	101.24

.shape

it shows the total of rows and no of columns of the dataframe

```
data.shape
```

```
(8784, 8)
```

.index

this attribute provides the index of the dataframe

```
data.index
```

```
RangeIndex(start=0, stop=8784, step=1)
```

.columns

it shows the name of each columns

```
data.columns
```

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

.dtype

it shows the data type of each columns

```
data.dtypes
```

```
data.dtypes
```

```
Date/Time            object
Temp_C              float64
Dew Point Temp_C    float64
Rel Hum_%             int64
Wind Speed_km/h       int64
Visibility_km       float64
Press_kPa           float64
Weather              object
dtype: object
```

.unique()

in a column,it shows at the unique values .it can be applied on a single column only.not on the whole dataframe

```
data['Weather'].unique()
```

```
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)
```

.nunique()

it shows the total no of unique values in each columns.it can be applied on a single columns as well as on whole dataframe.

```
data.nunique()
```

```
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
```

.count

it shows the total no of non-null in each column.it can be applied on a single column as well as whole dataframe.

```
data.count()
```

```
Date/Time           8784
Temp_C              8784
Dew Point Temp_C    8784
Rel Hum_%           8784
Wind Speed_km/h     8784
Visibility_km       8784
Press_kPa           8784
Weather             8784
dtype: int64
```

.value_counts

in a columns ,it shows all the unique values with their count .it can be applied on sigle column only.

```
data['Weather'].value_counts()
```

```
Mainly Clear                         2106
Mostly Cloudy                        2069
Cloudy                               1728
Clear                                1326
Snow                                  390
Rain                                  306
Rain Showers                          188
Fog                                   150
Rain,Fog                              116
Drizzle,Fog                            80
```

```
Snow Showers                                60
Drizzle                                     41
Snow,Fog                                    37
Snow,Blowing Snow                           19
Rain,Snow                                   18
Thunderstorms,Rain Showers                  16
Haze                                        16
Drizzle,Snow,Fog                            15
Freezing Rain                               14
Freezing Drizzle,Snow                       11
Freezing Drizzle                             7
Snow,Ice Pellets                             6
Freezing Drizzle,Fog                         6
Snow,Haze                                    5
Freezing Fog                                 4
Snow Showers,Fog                             4
Moderate Snow                                4
Rain,Snow,Ice Pellets                        4
Freezing Rain,Fog                            4
Freezing Drizzle,Haze                        3
Rain,Haze                                    3
Thunderstorms,Rain                           3
Thunderstorms,Rain Showers,Fog               3
Freezing Rain,Haze                           2
Drizzle,Snow                                 2
Rain Showers,Snow Showers                    2
Thunderstorms                                2
Moderate Snow,Blowing Snow                   2
Rain Showers,Fog                             1
Thunderstorms,Moderate Rain Showers,Fog      1
Snow Pellets                                 1
Rain,Snow,Fog                                1
Moderate Rain,Fog                            1
Freezing Rain,Ice Pellets,Fog                1
Drizzle,Ice Pellets,Fog                      1
Thunderstorms,Rain,Fog                       1
Rain,Ice Pellets                             1
Rain,Snow Grains                             1
Thunderstorms,Heavy Rain Showers             1
Freezing Rain,Snow Grains                    1
Name: Weather, dtype: int64
```

.info()

provides basic infornation about the dataframe.

```
data.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
```

Q).1 Find all the unique "wind speed " values in the data

```
data.head(2)
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_kPa
	1/1/2012						

```
data.nunique()
```

```
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
```

```
data['Wind Speed_km/h'].nunique()
```

```
34
```

```
data['Wind Speed_km/h'].unique()
```

```
array([ 4,  7,  6,  9, 15, 13, 20, 22, 19, 24, 30, 35, 39, 32, 33, 26, 44,
```

```
       43, 48, 37, 28, 17, 11,  0, 83, 70, 57, 46, 41, 52, 50, 63, 54,  2])
```

Q) 2.find the number of times when the "Weather is exactly clear"

```
data.Weather.value_counts()
```

```
Mainly Clear                              2106
Mostly Cloudy                             2069
Cloudy                                    1728
Clear                                     1326
Snow                                       390
Rain                                       306
Rain Showers                               188
Fog                                        150
Rain,Fog                                   116
Drizzle,Fog                                 80
Snow Showers                                60
Drizzle                                     41
Snow,Fog                                    37
Snow,Blowing Snow                           19
Rain,Snow                                   18
Thunderstorms,Rain Showers                  16
Haze                                        16
Drizzle,Snow,Fog                            15
Freezing Rain                               14
Freezing Drizzle,Snow                       11
Freezing Drizzle                             7
Snow,Ice Pellets                             6
Freezing Drizzle,Fog                         6
Snow,Haze                                    5
Freezing Fog                                 4
Snow Showers,Fog                             4
Moderate Snow                                4
Rain,Snow,Ice Pellets                        4
Freezing Rain,Fog                            4
Freezing Drizzle,Haze                        3
Rain,Haze                                    3
Thunderstorms,Rain                           3
Thunderstorms,Rain Showers,Fog               3
Freezing Rain,Haze                           2
Drizzle,Snow                                 2
Rain Showers,Snow Showers                    2
Thunderstorms                                2
Moderate Snow,Blowing Snow                   2
Rain Showers,Fog                             1
Thunderstorms,Moderate Rain Showers,Fog      1
```

```
Snow Pellets                                1
Rain,Snow,Fog                               1
Moderate Rain,Fog                           1
Freezing Rain,Ice Pellets,Fog               1
Drizzle,Ice Pellets,Fog                     1
Thunderstorms,Rain,Fog                      1
Rain,Ice Pellets                            1
Rain,Snow Grains                            1
Thunderstorms,Heavy Rain Showers            1
Freezing Rain,Snow Grains                   1
Name: Weather, dtype: int64
```

```
data[data.Weather=='Clear']
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
67	1/3/2012 19:00	-16.9	-24.8	50	24	25.0	101.
114	1/5/2012 18:00	-7.1	-14.4	56	11	25.0	100.
115	1/5/2012 19:00	-9.2	-15.4	61	7	25.0	100.
116	1/5/2012 20:00	-9.8	-15.7	62	9	25.0	100.
117	1/5/2012 21:00	-9.0	-14.8	63	13	25.0	100.
...	...	...	...	...	...	...	
8646	12/26/2012 6:00	-13.4	-14.8	89	4	25.0	102.

```
data.groupby('Weather').get_group('Clear')
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
67	1/3/2012 19:00	-16.9	-24.8	50	24	25.0	101.
114	1/5/2012 18:00	-7.1	-14.4	56	11	25.0	100.
115	1/5/2012 19:00	-9.2	-15.4	61	7	25.0	100.
116	1/5/2012	0.8	15.7	62	0	25.0	100

Q) 3. find the numbers of times when the 'wind speed was exactly 4 km/h'

12/26/2012

```
data[data['Wind Speed_km/h']==4]
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
0	1/1/2012 0:00	-1.8	-3.9	86	4	8.0	101.
1	1/1/2012 1:00	-1.8	-3.7	87	4	8.0	101.
96	1/5/2012 0:00	-8.8	-11.7	79	4	9.7	100.
101	1/5/2012 5:00	-7.0	-9.5	82	4	4.0	100.
146	1/7/2012 2:00	-8.1	-11.1	79	4	19.3	100.
...	...	...	...	...	...	...	
8768	12/31/2012 8:00	-8.6	-10.3	87	4	3.2	101.

Q) 4.find out the null values in the data

```
data.isnull().sum()
```

```
Date/Time           0
Temp_C              0
Dew Point Temp_C    0
Rel Hum_%           0
Wind Speed_km/h     0
Visibility_km       0
Press_kPa           0
Weather             0
dtype: int64
```

```
data.notnull().sum()
```

```
Date/Time           8784
Temp_C              8784
Dew Point Temp_C    8784
Rel Hum_%           8784
Wind Speed_km/h     8784
Visibility_km       8784
Press_kPa           8784
Weather             8784
dtype: int64
```

Q) 5.Rename the column name "Weather" of the dataframe to 'Weather Condition':

```
data.rename(columns={ 'Weather':'Weather Condition'})
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
0	1/1/2012 0:00	-1.8	-3.9	86	4	8.0	101.

Q) 6.What is the mean 'visibility' ?

2	2:00	-1.8	-3.4	89	7	4.0	101.

```
data.Visibility_km.mean()
```

```
27.66444672131151
```

4	1/1/2012	-1.5	-3.3	88	7	4.8	101

Q)7.what is the standard Deviation of 'pressure' in this data?

```
data.Press_kPa.std()
```

```
0.8440047459486474
```

Q)8.what is the variance of 'Relative Humidity' in this data?

```
data.head(2)
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_kPa
	1/1/2012						

```
data['Rel Hum_%'].var()
```

```
286.2485501984998
```

Q)9.Find all instances when 'snow' was recorded

```
data.head(2)
data['Weather'].value_counts()
```

```
Mainly Clear                                2106
Mostly Cloudy                               2069
Cloudy                                      1728
Clear                                       1326
Snow                                         390
Rain                                         306
Rain Showers                                 188
Fog                                          150
Rain,Fog                                     116
Drizzle,Fog                                   80
Snow Showers                                  60
Drizzle                                       41
Snow,Fog                                      37
Snow,Blowing Snow                             19
Rain,Snow                                     18
Thunderstorms,Rain Showers                    16
Haze                                          16
Drizzle,Snow,Fog                              15
Freezing Rain                                 14
Freezing Drizzle,Snow                         11
Freezing Drizzle                               7
Snow,Ice Pellets                               6
Freezing Drizzle,Fog                           6
Snow,Haze                                      5
Freezing Fog                                   4
Snow Showers,Fog                               4
Moderate Snow                                  4
Rain,Snow,Ice Pellets                          4
Freezing Rain,Fog                              4
Freezing Drizzle,Haze                          3
Rain,Haze                                      3
Thunderstorms,Rain                             3
Thunderstorms,Rain Showers,Fog                 3
Freezing Rain,Haze                             2
Drizzle,Snow                                   2
Rain Showers,Snow Showers                      2
Thunderstorms                                  2
Moderate Snow,Blowing Snow                     2
Rain Showers,Fog                               1
Thunderstorms,Moderate Rain Showers,Fog        1
Snow Pellets                                   1
Rain,Snow,Fog                                  1
Moderate Rain,Fog                              1
Freezing Rain,Ice Pellets,Fog                  1
Drizzle,Ice Pellets,Fog                        1
Thunderstorms,Rain,Fog                         1
Rain,Ice Pellets                               1
```

```
Rain,Snow Grains                          1
Thunderstorms,Heavy Rain Showers          1
Freezing Rain,Snow Grains                 1
Name: Weather, dtype: int64
```

```
data[data['Weather']=='Snow']
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
55	1/3/2012 7:00	-14.0	-19.5	63	19	25.0	100.
84	1/4/2012 12:00	-13.7	-21.7	51	11	24.1	101.
86	1/4/2012 14:00	-11.3	-19.0	53	7	19.3	100.
87	1/4/2012 15:00	-10.2	-16.3	61	11	9.7	100.
88	1/4/2012 16:00	-9.4	-15.5	61	13	19.3	100.
...	...	...	...	...	...	...	
8779	12/31/2012 19:00	0.1	-2.7	81	30	9.7	100.

Q)10.Find all Instances when 'Wind speed is above 24 ' and 'visibility is 25'

```
data[(data['Wind Speed_km/h']>24) & (data['Visibility_km']==25)]
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
23	1/1/2012 23:00	5.3	2.0	79	30	25.0	99.
24	1/2/2012 0:00	5.2	1.5	77	35	25.0	99.
25	1/2/2012 1:00	4.6	0.0	72	39	25.0	99.
26	1/2/2012 2:00	3.9	-0.9	71	32	25.0	99.

Q)11.What is the Mean value of each column against each 'Weather Condition'?

17:00

```
data.groupby('Weather').mean()
```

Weather	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visib
Clear	6.825716	0.089367	64.497738	10.557315	3
Cloudy	7.970544	2.375810	69.592593	16.127315	2
Drizzle	7.353659	5.504878	88.243902	16.097561	1
Drizzle,Fog	8.067500	7.033750	93.275000	11.862500	
Drizzle,Ice Pellets,Fog	0.400000	-0.700000	92.000000	20.000000	
Drizzle,Snow	1.050000	0.150000	93.500000	14.000000	1
Drizzle,Snow,Fog	0.693333	0.120000	95.866667	15.533333	
Fog	4.303333	3.159333	92.286667	7.946667	
Freezing Drizzle	-5.657143	-8.000000	83.571429	16.571429	
Freezing Drizzle,Fog	-2.533333	-4.183333	88.500000	17.000000	
Freezing Drizzle,Haze	-5.433333	-8.000000	82.000000	10.333333	
Freezing Drizzle,Snow	-5.109091	-7.072727	86.090909	16.272727	
Freezing Fog	-7.575000	-9.250000	87.750000	4.750000	
Freezing Rain	-3.885714	-6.078571	84.642857	19.214286	
Freezing Rain,Fog	-2.225000	-3.750000	89.500000	15.500000	
Freezing Rain,Haze	-4.900000	-7.450000	82.500000	7.500000	
Freezing Rain,Ice Pellets,Fog	-2.600000	-3.700000	92.000000	28.000000	
Freezing Rain,Snow Grains	-5.000000	-7.300000	84.000000	32.000000	
Haze	-0.200000	-2.975000	81.625000	10.437500	
Mainly Clear	12.558927	4.581671	60.667142	14.144824	3
Moderate Rain,Fog	1.700000	0.800000	94.000000	17.000000	
Moderate Snow	-5.525000	-7.250000	87.750000	33.750000	
Moderate Snow,Blowing Snow	-5.450000	-6.500000	92.500000	40.000000	
Mostly Cloudy	10.574287	3.131174	62.102465	15.813920	3
Rain	9.786275	7.042810	83.624183	19.254902	1
Rain Showers	13.722340	9.187766	75.159574	17.132979	2

Rain Showers,Fog	12.800000	12.100000	96.000000	13.000000	
Rain Showers,Snow Showers	2.150000	-1.500000	76.500000	22.500000	2
Rain,Fog	8.273276	7.219828	93.189655	14.793103	
Rain,Haze	4.633333	2.066667	83.333333	11.666667	
Rain,Ice Pellets	0.600000	-0.600000	92.000000	24.000000	
Rain,Snow	1.055556	-0.566667	89.000000	28.388889	1

Q)12.What is the minimum & Maximum value of each column against each 'Weather condition'?

```
data.groupby('Weather').min()
```

Weather	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visi
Clear	1/11/2012 1:00	-23.3	-28.5	20	0	
Cloudy	1/1/2012 17:00	-21.4	-26.8	18	0	
Drizzle	1/23/2012 21:00	1.1	-0.2	74	0	
Drizzle,Fog	1/23/2012 20:00	0.0	-1.6	85	0	
Drizzle,Ice Pellets,Fog	12/17/2012 9:00	0.4	-0.7	92	20	
Drizzle,Snow	12/17/2012 15:00	0.9	0.1	92	9	
Drizzle,Snow,Fog	12/18/2012 21:00	0.3	-0.1	92	7	
Fog	1/1/2012 0:00	-16.0	-17.2	80	0	
Freezing Drizzle	1/13/2012 10:00	-9.0	-12.2	78	6	
Freezing Drizzle,Fog	1/1/2012 2:00	-6.4	-9.0	82	6	
Freezing Drizzle,Haze	2/1/2012 11:00	-5.8	-8.3	81	9	
Freezing Drizzle,Snow	1/13/2012 3:00	-8.3	-10.4	79	6	
Freezing Fog	1/22/2012 6:00	-19.0	-22.9	71	0	
Freezing Rain	1/13/2012 11:00	-6.5	-9.0	81	7	
Freezing Rain,Fog	1/17/2012 23:00	-6.1	-8.7	82	7	
Freezing Rain,Haze	2/1/2012 14:00	-4.9	-7.5	82	6	
Freezing Rain,Ice Pellets,Fog	12/17/2012 3:00	-2.6	-3.7	92	28	

Freezing Rain,Snow Grains	1/13/2012 9:00	-5.0	-7.3	84	32
Haze	1/22/2012 12:00	-11.5	-16.0	68	0
Mainly Clear	1/10/2012 11:00	-22.8	-28.0	20	0
Moderate Rain,Fog	12/10/2012 8:00	1.7	0.8	94	17

```
data.groupby('Weather').max()
```

Weather	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visi
Clear	9/9/2012 5:00	32.8	20.4	99	33	
Cloudy	9/9/2012 23:00	30.5	22.6	99	54	
Drizzle	9/30/2012 3:00	18.8	17.7	96	30	
Drizzle,Fog	9/30/2012 2:00	19.9	19.1	100	28	
Drizzle,Ice Pellets,Fog	12/17/2012 9:00	0.4	-0.7	92	20	
Drizzle,Snow	12/19/2012 18:00	1.2	0.2	95	19	
Drizzle,Snow,Fog	12/22/2012 3:00	1.1	0.6	98	32	
Fog	9/22/2012 0:00	20.8	19.6	100	22	
Freezing Drizzle	2/1/2012 5:00	-2.3	-3.3	93	26	
Freezing Drizzle,Fog	12/10/2012 5:00	-0.3	-2.3	94	33	
Freezing Drizzle,Haze	2/1/2012 13:00	-5.0	-7.7	83	11	
Freezing Drizzle,Snow	3/2/2012 12:00	-3.3	-4.6	94	24	
Freezing Fog	3/17/2012 6:00	-0.1	-0.3	99	9	
Freezing Rain	2/1/2012 7:00	0.3	-1.7	92	28	
Freezing Rain,Fog	12/17/2012 1:00	0.1	-0.9	93	26	
Freezing Rain,Haze	2/1/2012 15:00	-4.9	-7.4	83	9	
Freezing Rain,Ice Pellets,Fog	12/17/2012 3:00	-2.6	-3.7	92	28	

Freezing Rain,Snow 1/13/2012

Q)13.show all the Records where Weather condition is fog.

Mainly Clear 9:00

```
data[data['Weather']=='Fog']
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
0	1/1/2012 0:00	-1.8	-3.9	86	4	8.0	101.
1	1/1/2012 1:00	-1.8	-3.7	87	4	8.0	101.
4	1/1/2012 4:00	-1.5	-3.3	88	7	4.8	101.
5	1/1/2012 5:00	-1.4	-3.3	87	9	6.4	101.
6	1/1/2012 6:00	-1.5	-3.1	89	7	6.4	101.
...	...	...	...	...	...	...	
8716	12/29/2012 4:00	-16.0	-17.2	90	6	9.7	101.

Rain Haze 3/13/2012

Q)14.Find all instance when 'Weather is clear ' or 'visibility is above 40.'

```
data[(data['Weather']=='Clear') | (data['Visibility_km']>40)]
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
67	1/3/2012 19:00	-16.9	-24.8	50	24	25.0	101.
106	1/5/2012 10:00	-6.0	-10.0	73	17	48.3	100.
107	1/5/2012 11:00	-5.6	-10.2	70	22	48.3	100.
108	1/5/2012 12:00	-4.7	-9.6	69	20	48.3	100.
	1/5/2012						

Q)15.find 'Weather is clear' and 'Relative Humidity is greater than 50'or 'visibility is above 40'

```
data[(data['Weather']=='Clear')&(data['Rel Hum_%']>50)|(data['Visi
```

	Date/Time	Temp_C	Dew Point Temp_C	Rel Hum_%	Wind Speed_km/h	Visibility_km	Press_k
106	1/5/2012 10:00	-6.0	-10.0	73	17	48.3	100.
107	1/5/2012 11:00	-5.6	-10.2	70	22	48.3	100.
108	1/5/2012 12:00	-4.7	-9.6	69	20	48.3	100.
109	1/5/2012 13:00	-4.4	-9.7	66	26	48.3	100.
110	1/5/2012 14:00	-5.1	-10.7	65	22	48.3	100.
...	...	...	...	...	...	...	
8749	12/30/2012 13:00	-12.4	-16.2	73	37	48.3	100.

✓ 0s completed at 12:10 AM