In [1]:
```
import pandas as pd
df = pd.read_csv('weather_data.csv')
df
```

Out[1]:

	day	temperature	windspeed	event
0	1/1/2017	32.0	6.0	Rain
1	1/4/2017	NaN	9.0	Sunny
2	1/5/2017	28.0	NaN	Snow
3	1/6/2017	NaN	7.0	NaN
4	1/7/2017	32.0	NaN	Rain
5	1/8/2017	NaN	NaN	Sunny
6	1/9/2017	NaN	NaN	NaN
7	1/10/2017	34.0	8.0	Cloudy
8	1/11/2017	40.0	12.0	Sunny

In [ ]:
```

```

In [6]:
```
df['temperature'].median()
```

Out[6]:
```
32.0
```

In [7]:
```
df['windspeed'].median()
```

Out[7]:
```
8.0
```

In [8]:
```
df['event'].mode()
```

Out[8]:
```
0    Sunny
dtype: object
```

In [9]:
```
df.fillna(0)
```

Out[9]:

	day	temperature	windspeed	event
0	1/1/2017	32.0	6.0	Rain
1	1/4/2017	0.0	9.0	Sunny
2	1/5/2017	28.0	0.0	Snow
3	1/6/2017	0.0	7.0	0
4	1/7/2017	32.0	0.0	Rain
5	1/8/2017	0.0	0.0	Sunny
6	1/9/2017	0.0	0.0	0
7	1/10/2017	34.0	8.0	Cloudy
8	1/11/2017	40.0	12.0	Sunny

In [11]:
```
df.fillna({
    'temperature' : 32.0,
    'windspeed' : 8.0,
    'event' : 'Sunny',

})
```

Out[11]:

	day	temperature	windspeed	event
0	1/1/2017	32.0	6.0	Rain
1	1/4/2017	32.0	9.0	Sunny
2	1/5/2017	28.0	8.0	Snow
3	1/6/2017	32.0	7.0	Sunny
4	1/7/2017	32.0	8.0	Rain
5	1/8/2017	32.0	8.0	Sunny
6	1/9/2017	32.0	8.0	Sunny
7	1/10/2017	34.0	8.0	Cloudy
8	1/11/2017	40.0	12.0	Sunny

In [19]:
```
df.dropna(how = 'all' )
```

Out[19]:

	day	temperature	windspeed	event
0	1/1/2017	32.0	6.0	Rain
1	1/4/2017	NaN	9.0	Sunny
2	1/5/2017	28.0	NaN	Snow
3	1/6/2017	NaN	7.0	NaN
4	1/7/2017	32.0	NaN	Rain
5	1/8/2017	NaN	NaN	Sunny
6	1/9/2017	NaN	NaN	NaN
7	1/10/2017	34.0	8.0	Cloudy
8	1/11/2017	40.0	12.0	Sunny

In [44]:
```
df.dropna(thresh = 3)
```

Out[44]:

	day	temperature	windspeed	event
0	1/1/2017	32.0	6.0	Rain
1	1/4/2017	NaN	9.0	Sunny
2	1/5/2017	28.0	NaN	Snow
4	1/7/2017	32.0	NaN	Rain
7	1/10/2017	34.0	8.0	Cloudy
8	1/11/2017	40.0	12.0	Sunny

In [1]:
```
import pandas as pd
import numpy as np
df = pd.read_csv('weather_data1.csv')
df
```

Out[1]:

	day	temperature	windspeed	event
0	01-01-2017	32	6.0	Rain
1	01-04-2017	-99999	9.0	Sunny
2	01-05-2017	28	NaN	Snow
3	01-06-2017	-99999	7.0	Sunny
4	01-07-2017	32	-99999.0	Rain
5	01-08-2017	-99999	-99999.0	Sunny
6	01-09-2017	-99999	-99999.0	Sunny
7	01-10-2017	34	8.0	Cloudy
8	01-11-2017	40	12.0	Sunny

In [3]:
```
df1 = df.replace(-99999,np.NaN)      #replace function is used to replace a specific value
df1                                  #parameters are (replacing value,and what to be replace
d)
```

Out[3]:

	day	temperature	windspeed	event
0	01-01-2017	32.0	6.0	Rain
1	01-04-2017	NaN	9.0	Sunny
2	01-05-2017	28.0	NaN	Snow
3	01-06-2017	NaN	7.0	Sunny
4	01-07-2017	32.0	NaN	Rain
5	01-08-2017	NaN	NaN	Sunny
6	01-09-2017	NaN	NaN	Sunny
7	01-10-2017	34.0	8.0	Cloudy
8	01-11-2017	40.0	12.0	Sunny

In [ ]:
```
#suppose we have 2 or 3 values to be replaced then use list
#    [-99999,-88888,np.NaN]
```

In [4]:
```
df
```

Out[4]:

	day	temperature	windspeed	event
0	01-01-2017	32	6.0	Rain
1	01-04-2017	-99999	9.0	Sunny
2	01-05-2017	28	NaN	Snow
3	01-06-2017	-99999	7.0	Sunny
4	01-07-2017	32	-99999.0	Rain
5	01-08-2017	-99999	-99999.0	Sunny
6	01-09-2017	-99999	-99999.0	Sunny
7	01-10-2017	34	8.0	Cloudy
8	01-11-2017	40	12.0	Sunny

In [7]:
```
df2 = df.replace({          #to replace by each row use dictionary
    'temperature' : -99999,
    'windspeed' : -99999,
},np.NaN)
df2
```

Out[7]:

	day	temperature	windspeed	event
0	01-01-2017	32.0	6.0	Rain
1	01-04-2017	NaN	9.0	Sunny
2	01-05-2017	28.0	NaN	Snow
3	01-06-2017	NaN	7.0	Sunny
4	01-07-2017	32.0	NaN	Rain
5	01-08-2017	NaN	NaN	Sunny
6	01-09-2017	NaN	NaN	Sunny
7	01-10-2017	34.0	8.0	Cloudy
8	01-11-2017	40.0	12.0	Sunny

In [ ]:
```
#new = df.replace({
#    -99999: np.NaN
#    No Event : 'Sunny'  #if to replace with exact value in any row or column use this
#})
#new
```

In [3]:
```
import pandas as pd
reg = pd.read_csv('weather_data1.csv')
reg
```

Out[3]:

	day	temperature	windspeed	event
0	01-01-2017	32	6mph	Rain
1	01-04-2017	-99999	9	Sunny
2	01-05-2017	kms	NaN	Snow
3	01-06-2017	-99999	mph	Sunny
4	01-07-2017	32	-99999	Rain
5	01-08-2017	-99999	-99999	Sunny
6	01-09-2017	-99999	-99999	Sunny
7	01-10-2017	34	8	Cloudy
8	01-11-2017	40	12	Sunny

In [6]:
```
new_reg = reg.replace('[A-Za-z]','',regex=True)    #parametre removes all the words starts f
rom A-ZAa-z so event gone
new_reg
```

Out[6]:

	day	temperature	windspeed	event
0	01-01-2017	32	6	
1	01-04-2017	-99999	9	
2	01-05-2017		NaN	
3	01-06-2017	-99999		
4	01-07-2017	32	-99999	
5	01-08-2017	-99999	-99999	
6	01-09-2017	-99999	-99999	
7	01-10-2017	34	8	
8	01-11-2017	40	12	

In [11]:
```
new_reg1 = reg.replace({
    'temperature' : '[A-Za-z]',
    'windspeed' : '[A-Za-z]'
    },'',regex =True)
new_reg1
```

Out[11]:

	day	temperature	windspeed	event
0	01-01-2017	32	6	Rain
1	01-04-2017	-99999	9	Sunny
2	01-05-2017		NaN	Snow
3	01-06-2017	-99999		Sunny
4	01-07-2017	32	-99999	Rain
5	01-08-2017	-99999	-99999	Sunny
6	01-09-2017	-99999	-99999	Sunny
7	01-10-2017	34	8	Cloudy
8	01-11-2017	40	12	Sunny

In [ ]:
```
#replace function also helps in changing the entire list
```

In [12]:
```
last = pd.DataFrame({
    'score' :['exceptional','good','oustanding','good'],
    'studentname' : ['soda','sunny','kukk','nag',]
})
last
```

Out[12]:

	score	studentname
0	exceptional	soda
1	good	sunny
2	oustanding	kukk
3	good	nag

In [15]:
```
new_last = last.replace({'exceptional','good','oustanding','good'},{7,8,9,9})
new_last
```

Out[15]:

	score	studentname
0	7	soda
1	9	sunny
2	9	kukk
3	9	nag

In [ ]:
```

```