1. Find maximum temperature in each of the cities

1. Find average wind speed per city

In [4]:
```
import pandas as pd
df= pd.read_csv('C:/Users/prasa/Desktop/ds projects/panda/weather_by_cities7.csv')
df
```

Out[4]:

	day	city	temperature	windspeed	event
0	01-01-2017	new york	32	6	Rain
1	01-02-2017	new york	36	7	Sunny
2	01-03-2017	new york	28	12	Snow
3	01-04-2017	new york	33	7	Sunny
4	01-01-2017	mumbai	90	5	Sunny
5	01-02-2017	mumbai	85	12	Fog
6	01-03-2017	mumbai	87	15	Fog
7	01-04-2017	mumbai	92	5	Rain
8	01-01-2017	paris	45	20	Sunny
9	01-02-2017	paris	50	13	Cloudy
10	01-03-2017	paris	54	8	Cloudy
11	01-04-2017	paris	42	10	Cloudy

In [5]:
```
g = df.groupby('city')
g
```

Out[5]:
```
<pandas.core.groupby.generic.DataFrameGroupBy object at 0x000002565830D
```

```
348>
```

In [6]:
```
for city, city_df in g:
    print(city)
    print(city_df)
```

```
mumbai
          day    city  temperature  windspeed  event
4  01-01-2017  mumbai           90          5  Sunny
5  01-02-2017  mumbai           85         12    Fog
6  01-03-2017  mumbai           87         15    Fog
7  01-04-2017  mumbai           92          5   Rain
new york
          day      city  temperature  windspeed  event
0  01-01-2017  new york           32          6   Rain
1  01-02-2017  new york           36          7  Sunny
2  01-03-2017  new york           28         12   Snow
3  01-04-2017  new york           33          7  Sunny
paris
           day   city  temperature  windspeed   event
8   01-01-2017  paris           45         20   Sunny
9   01-02-2017  paris           50         13  Cloudy
10  01-03-2017  paris           54          8  Cloudy
11  01-04-2017  paris           42         10  Cloudy
```

In [8]:
```
g.get_group('mumbai')
```

Out[8]:

	day	city	temperature	windspeed	event
4	01-01-2017	mumbai	90	5	Sunny
5	01-02-2017	mumbai	85	12	Fog
6	01-03-2017	mumbai	87	15	Fog
7	01-04-2017	mumbai	92	5	Rain

In [ ]:
```
#SELECT * from city_data GROUP BY city
```

In [9]:
```
g.max()
```

Out[9]:

city	day	temperature	windspeed	event
mumbai	01-04-2017	92	15	Sunny
new york	01-04-2017	36	12	Sunny
paris	01-04-2017	54	20	Sunny

In [10]:
```
g.mean()
```

Out[10]:

city	temperature	windspeed
mumbai	88.50	9.25
new york	32.25	8.00
paris	47.75	12.75

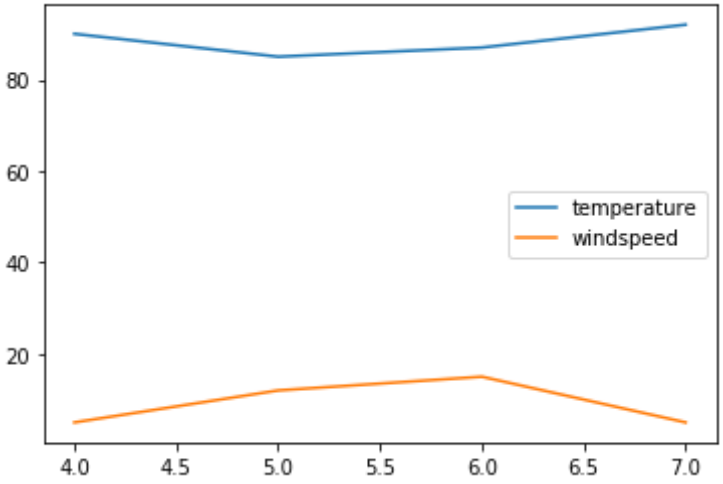
In [12]:
```
g.describe()
```

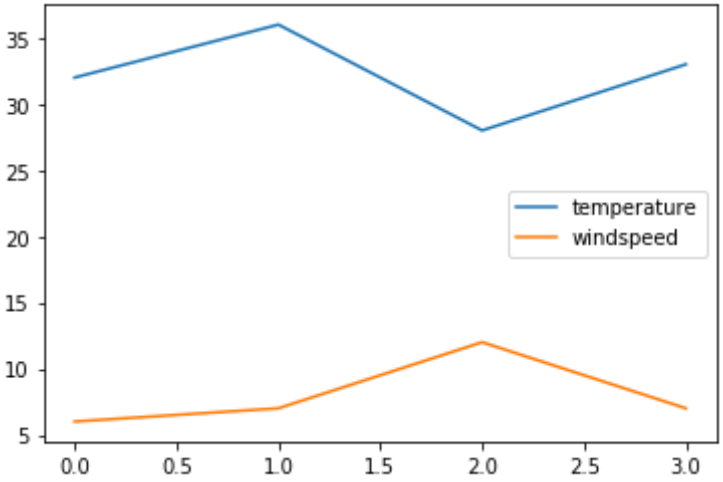
Out[12]:

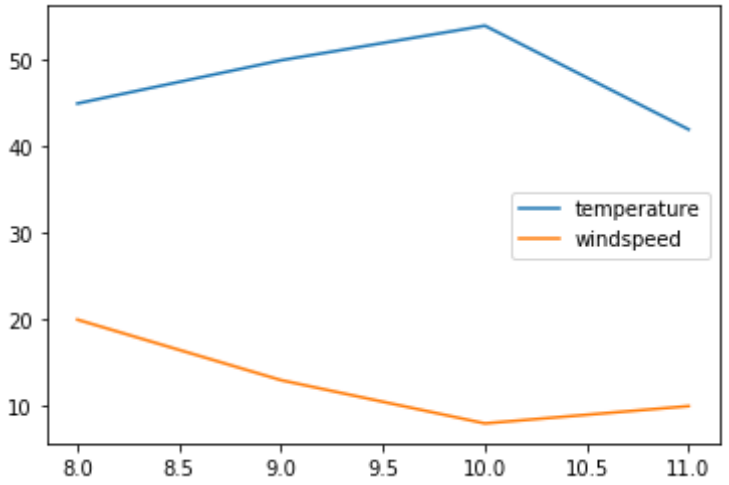
	temperature								windspeed				
	count	mean	std	min	25%	50%	75%	max	count	mean	std	min	25
city													
mumbai	4.0	88.50	3.109126	85.0	86.50	88.5	90.50	92.0	4.0	9.25	5.057997	5.0	5.
new york	4.0	32.25	3.304038	28.0	31.00	32.5	33.75	36.0	4.0	8.00	2.708013	6.0	6.
paris	4.0	47.75	5.315073	42.0	44.25	47.5	51.00	54.0	4.0	12.75	5.251984	8.0	9.

In [13]:
```
%matplotlib inline
g.plot()
```

Out[13]:
```
city
mumbai      AxesSubplot(0.125,0.125;0.775x0.755)
new york    AxesSubplot(0.125,0.125;0.775x0.755)
paris       AxesSubplot(0.125,0.125;0.775x0.755)
dtype: object
```







Google Pandas groupby