

Regression Plots

Seaborn has many built-in capabilities for regression plots, so we will only cover the **lmplot()** function for now.

lmplot allows you to display linear models, but it also conveniently allows you to split up those plots based off of features, as well as coloring the hue based off of features.

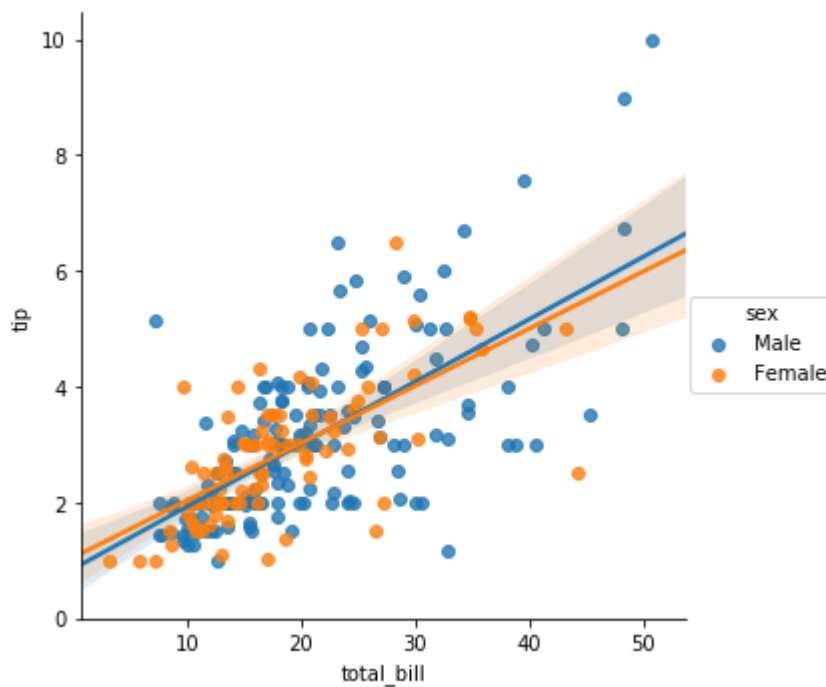
```
In [1]: import seaborn as sns
%matplotlib inline
tips = sns.load_dataset('tips')
tips.head()
```

Out[1]:

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

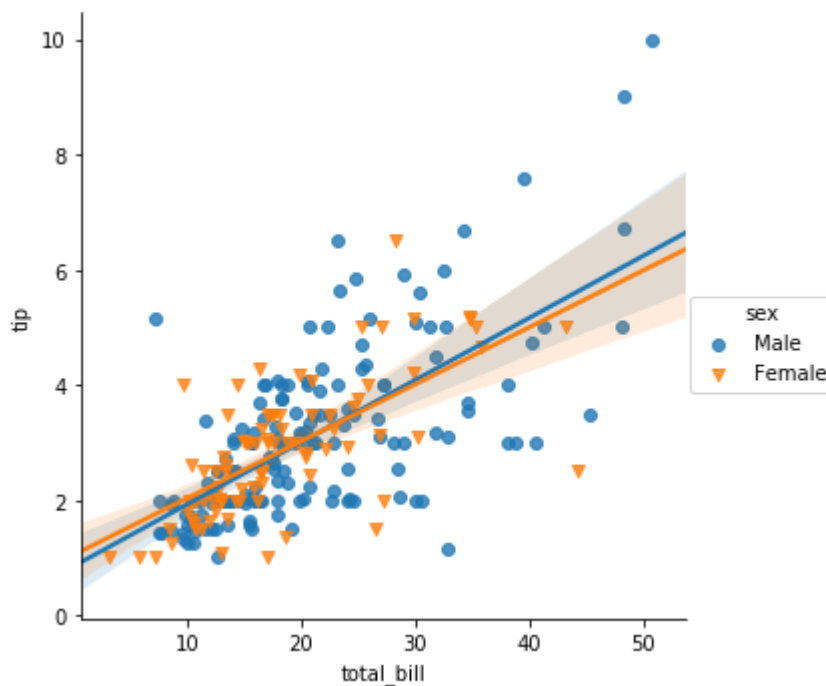
```
In [4]: sns.lmplot(x='total_bill',y='tip',data=tips,hue='sex')
```

Out[4]: <seaborn.axisgrid.FacetGrid at 0x54da8d0>



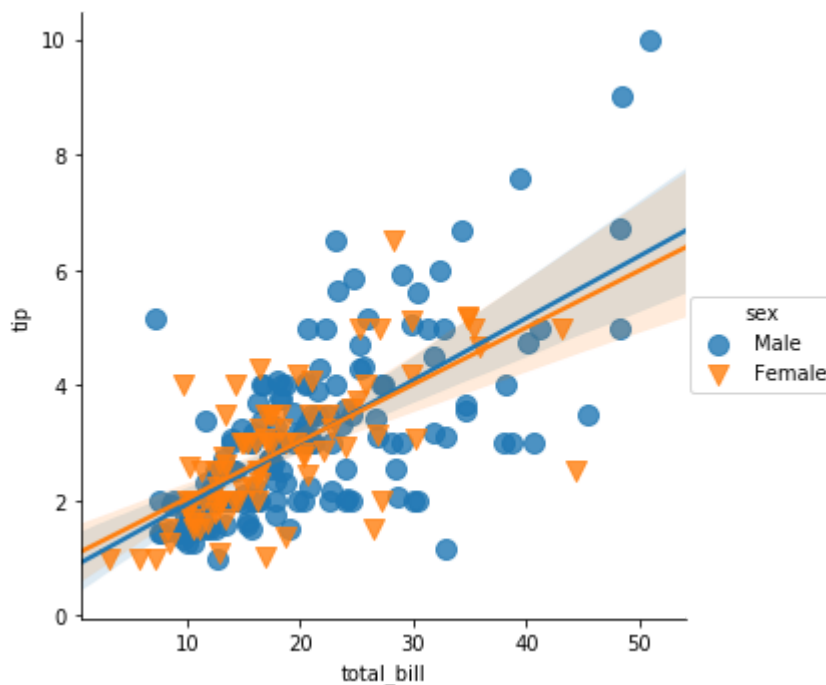
```
In [5]: sns.lmplot(x='total_bill',y='tip',data=tips,hue='sex',markers=['o','v'])
```

```
Out[5]: <seaborn.axisgrid.FacetGrid at 0x54cff60>
```



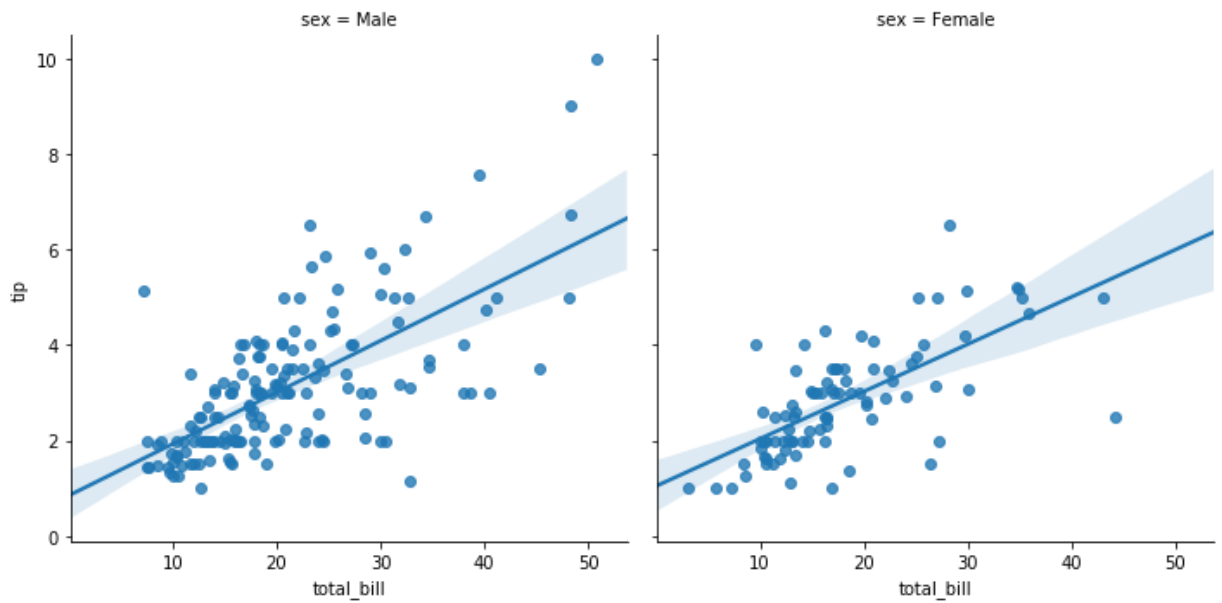
```
In [12]: # http://matplotlib.org/api/markers\_api.html
sns.lmplot(x='total_bill',y='tip',data=tips,hue='sex',
           markers=['o','v'],scatter_kws={'s':100})
```

```
Out[12]: <seaborn.axisgrid.FacetGrid at 0xb4a11d0>
```



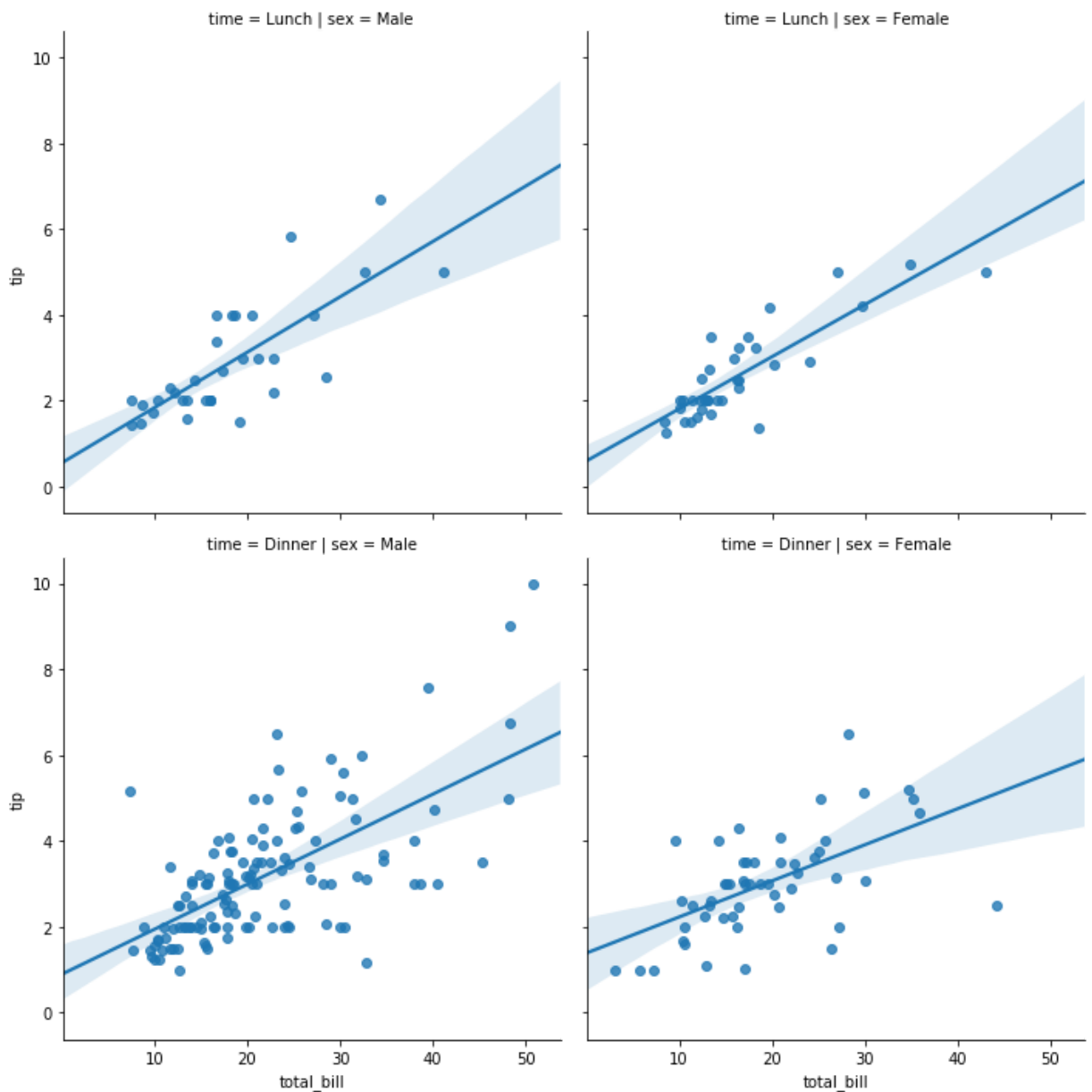
```
In [13]: sns.lmplot(x='total_bill',y='tip',data=tips,col='sex')
```

```
Out[13]: <seaborn.axisgrid.FacetGrid at 0xb50f358>
```



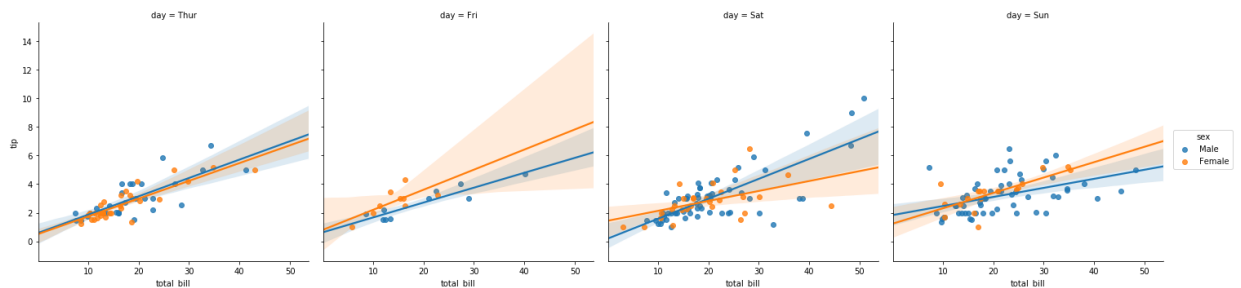
```
In [14]: sns.lmplot(x='total_bill',y='tip',data=tips,col='sex',row='time')
```

```
Out[14]: <seaborn.axisgrid.FacetGrid at 0xb5b3c50>
```



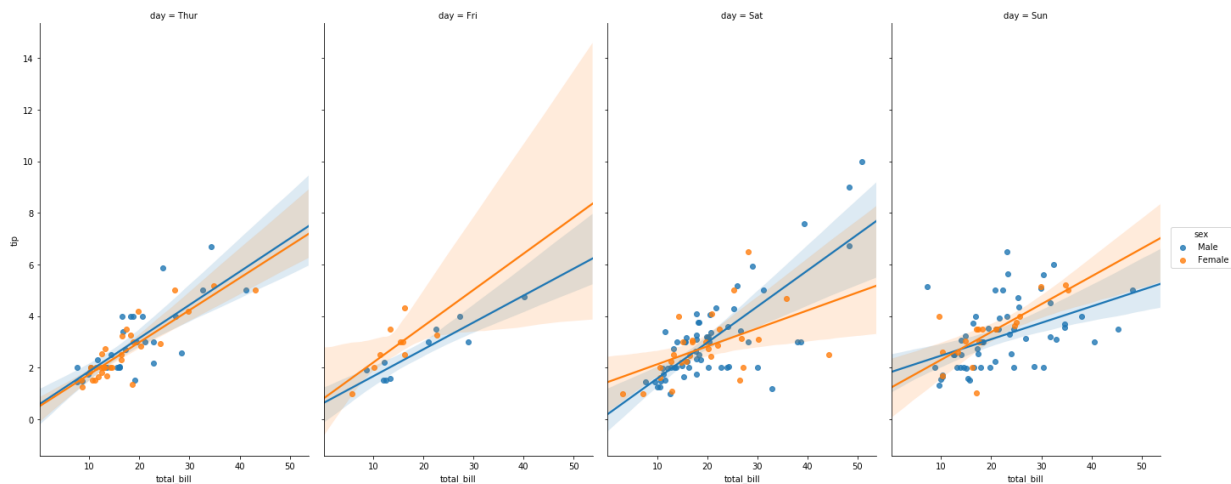
```
In [16]: sns.lmplot(x='total_bill',y='tip',data=tips,col='day',hue='sex')
```

```
Out[16]: <seaborn.axisgrid.FacetGrid at 0xd73c6a0>
```



```
In [17]: sns.lmplot(x='total_bill',y='tip',data=tips,col='day',hue='sex',aspect=0.6,size=8
```

```
Out[17]: <seaborn.axisgrid.FacetGrid at 0xdb14828>
```



```
In [ ]:
```