



# Python for Data Science

## Regression Plots



```
In [105]: import seaborn as sns
          %matplotlib inline
          tips = sns.load_dataset('tips')
          tips.head()
```

Out[105]:

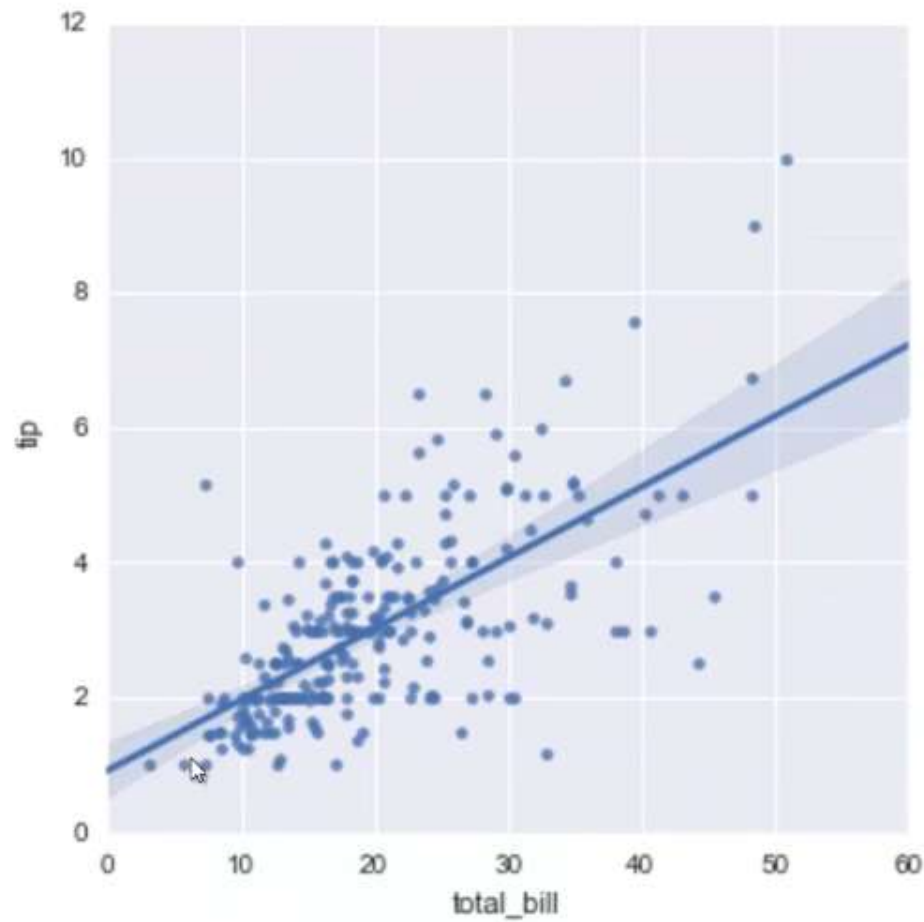
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

In [ ]:



```
In [106]: sns.lmplot(x='total_bill',y='tip',data=tips)
```

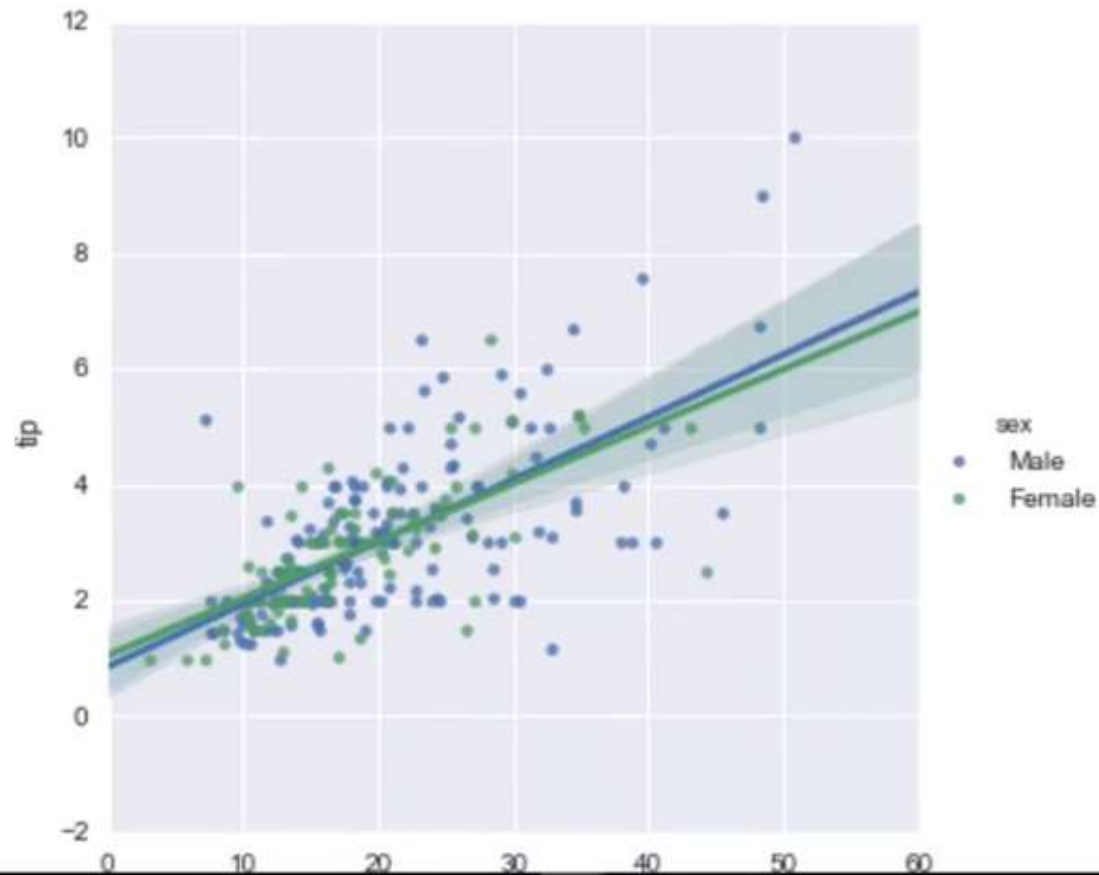
```
Out[106]: <seaborn.axisgrid.FacetGrid at 0x254d5ec19e8>
```



4	24.59	3.61	Female	No	Sun	Dinner	4
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In [107]: `sns.lmplot(x='total_bill',y='tip',data=tips,hue='sex')`

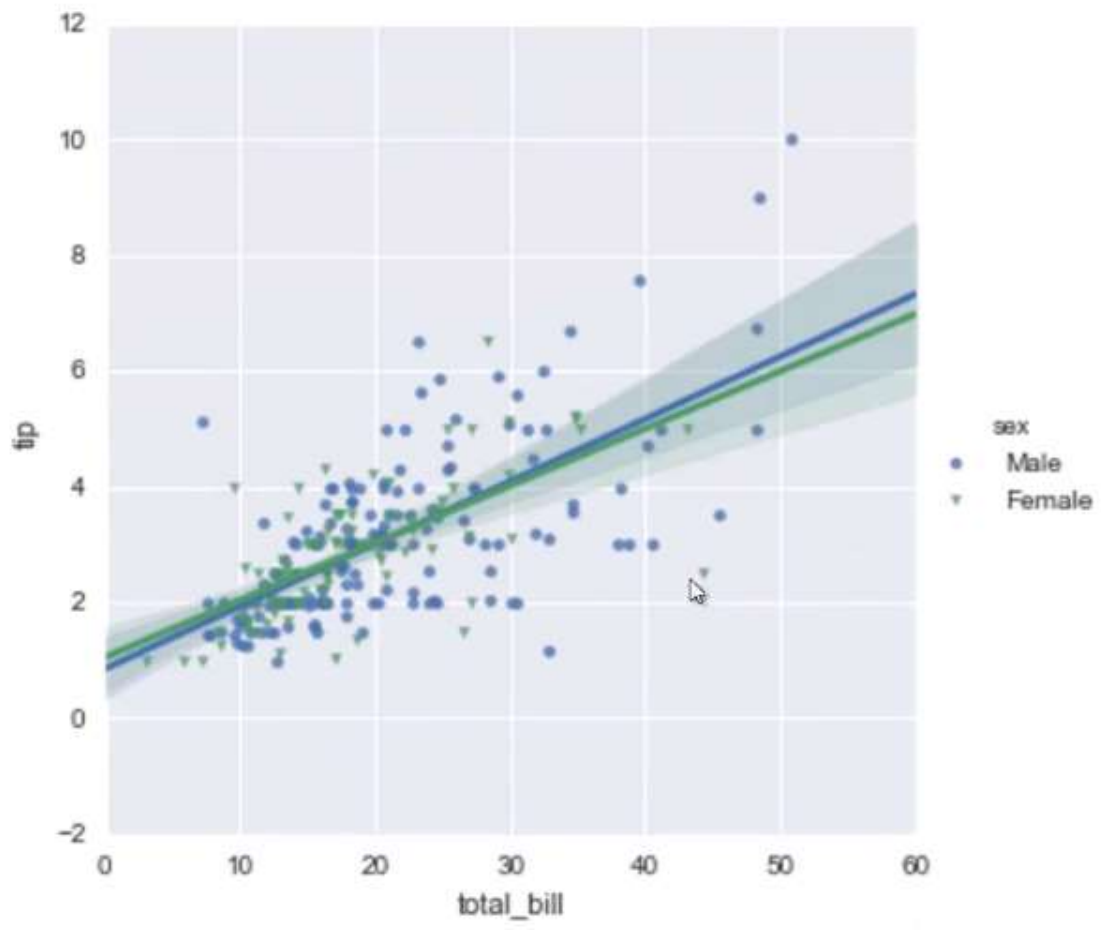
Out[107]: `<seaborn.axisgrid.FacetGrid at 0x254d5f47550>`



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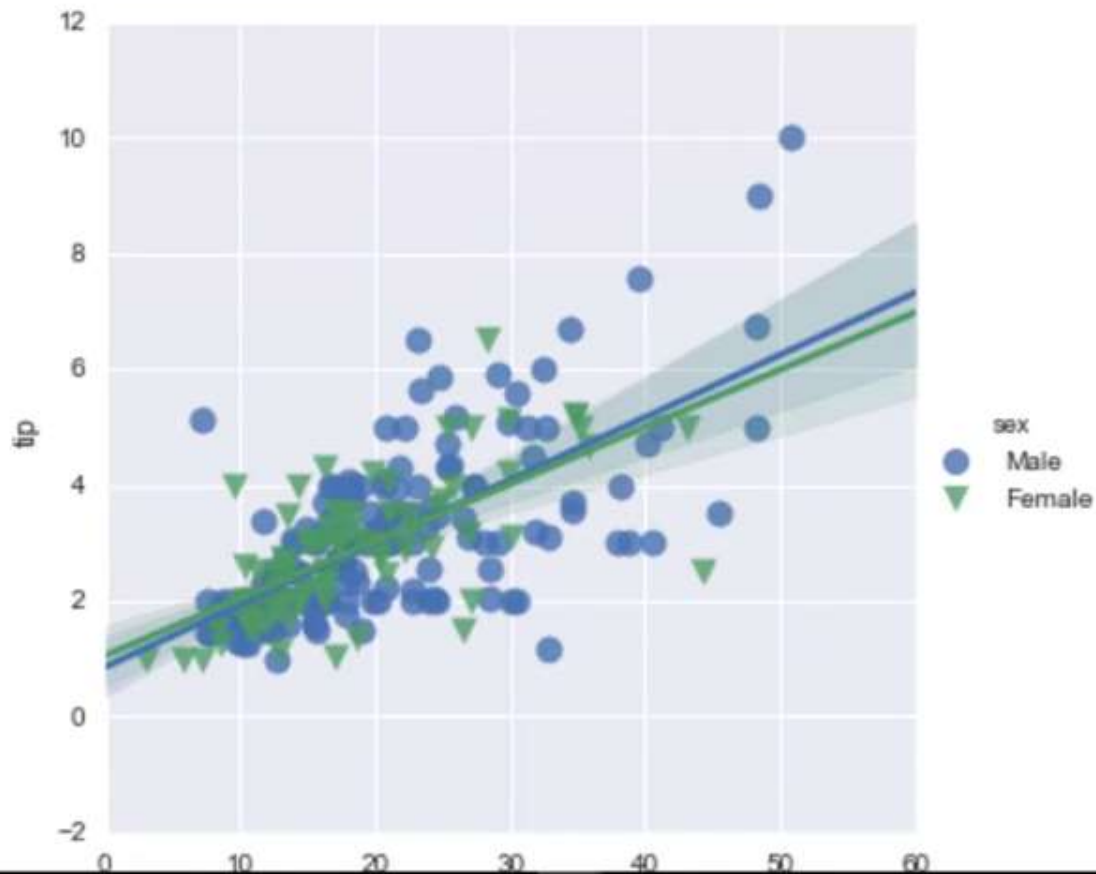
```
In [108]: sns.lmplot(x='total_bill',y='tip',data=tips,hue='sex',markers=['o','v'])
```

```
Out[108]: <seaborn.axisgrid.FacetGrid at 0x254d5fbc710>
```



```
In [109]: sns.lmplot(x='total_bill',y='tip',data=tips,hue='sex',markers=['o','v'],  
                  scatter_kws={'s':100})
```

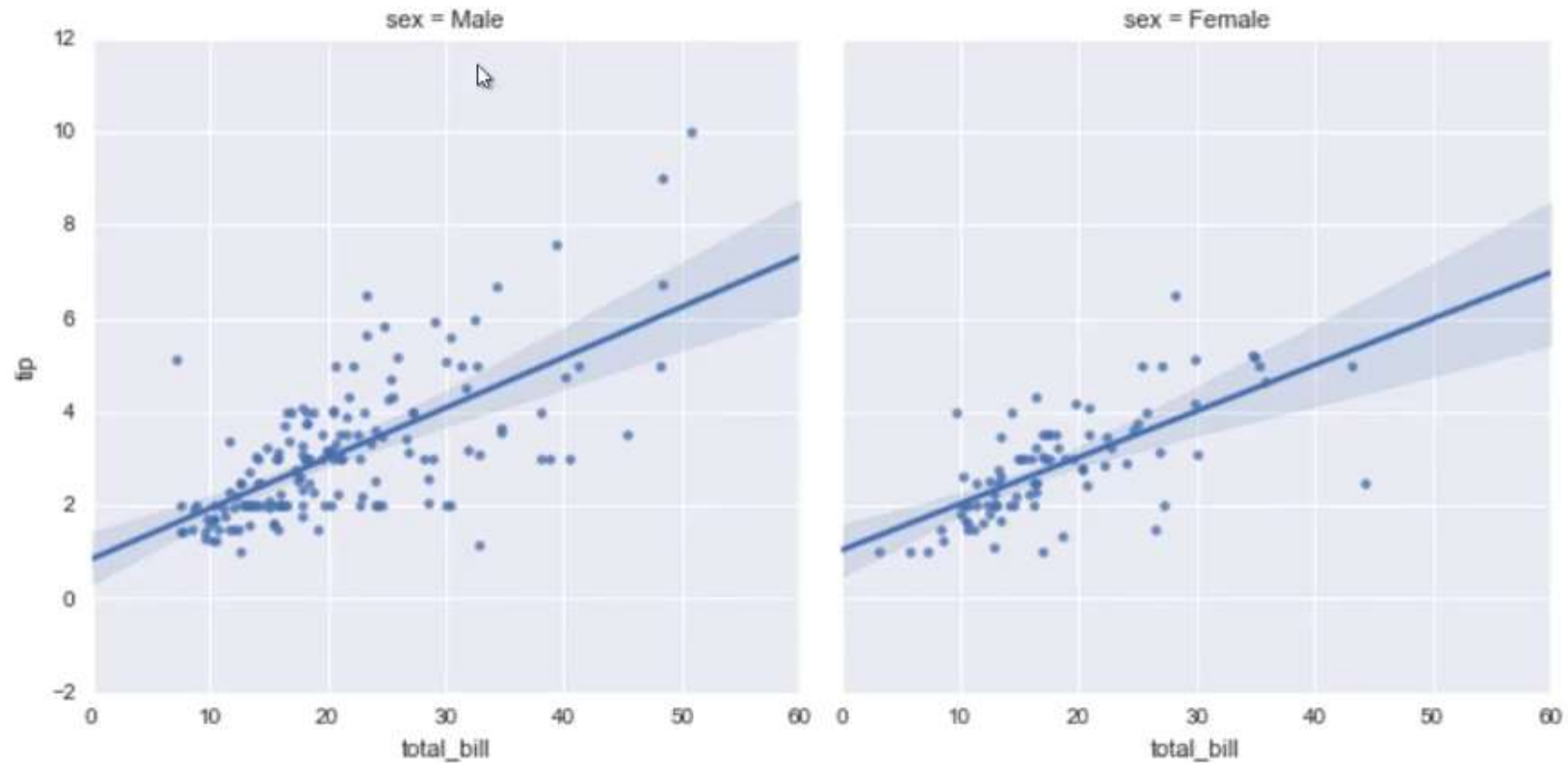
```
Out[109]: <seaborn.axisgrid.FacetGrid at 0x254d5ffea58>
```





```
In [112]: sns.lmplot(x='total_bill',y='tip',data=tips,col='sex')
```

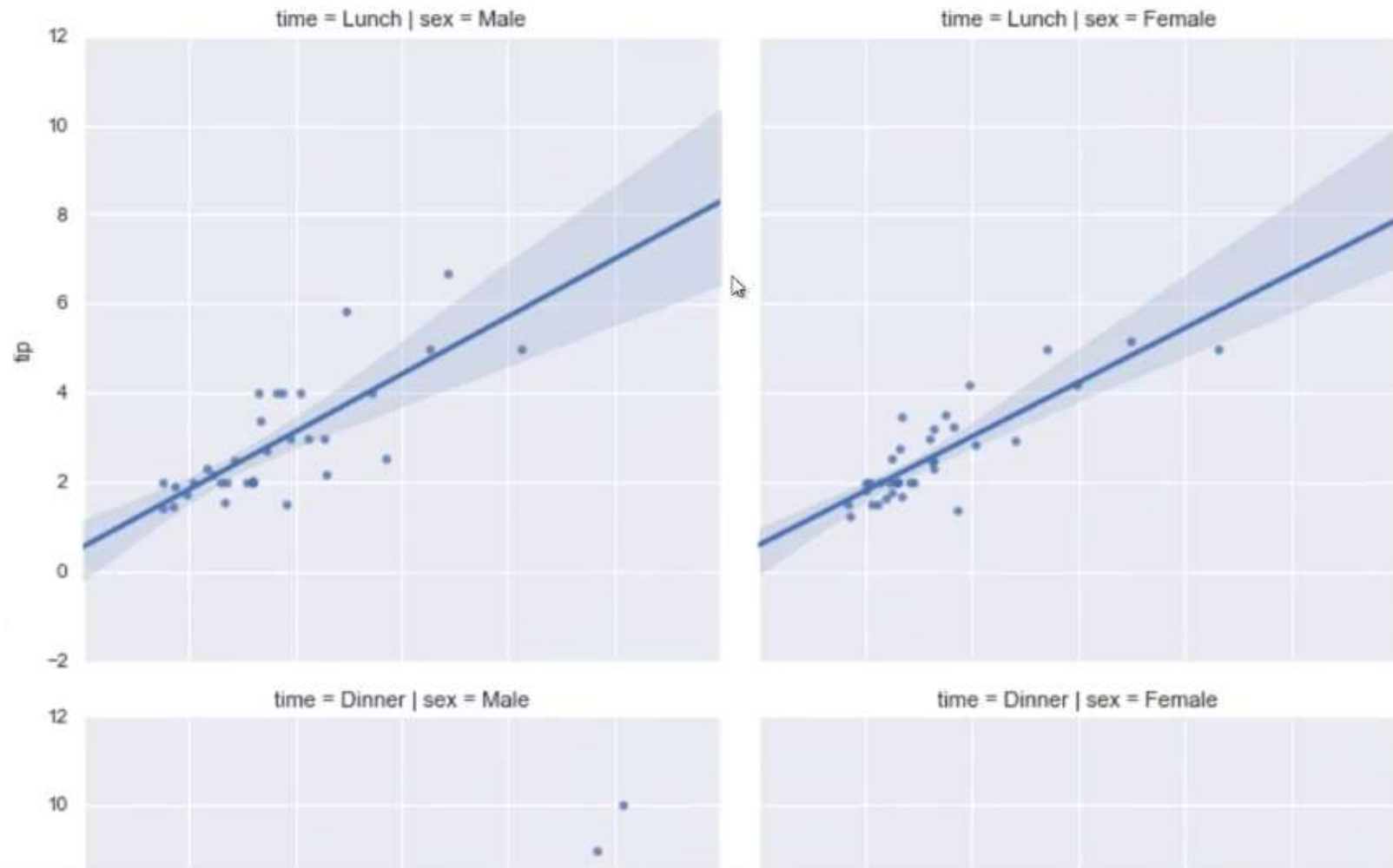
```
Out[112]: <seaborn.axisgrid.FacetGrid at 0x254d6193588>
```



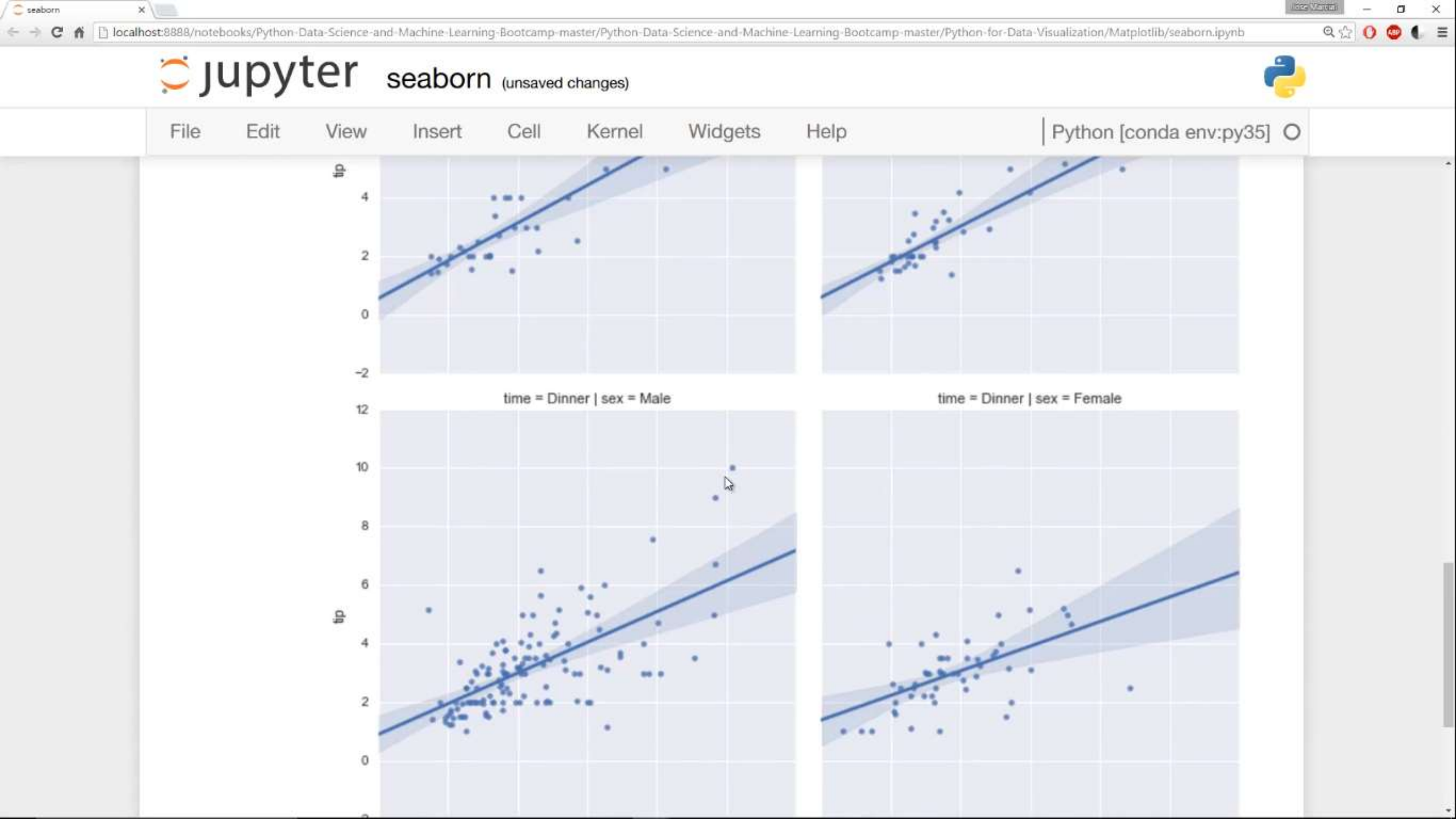


```
In [113]: sns.lmplot(x='total_bill',y='tip',data=tips,col='sex',row='time')
```

```
Out[113]: <seaborn.axisgrid.FacetGrid at 0x254d621c080>
```



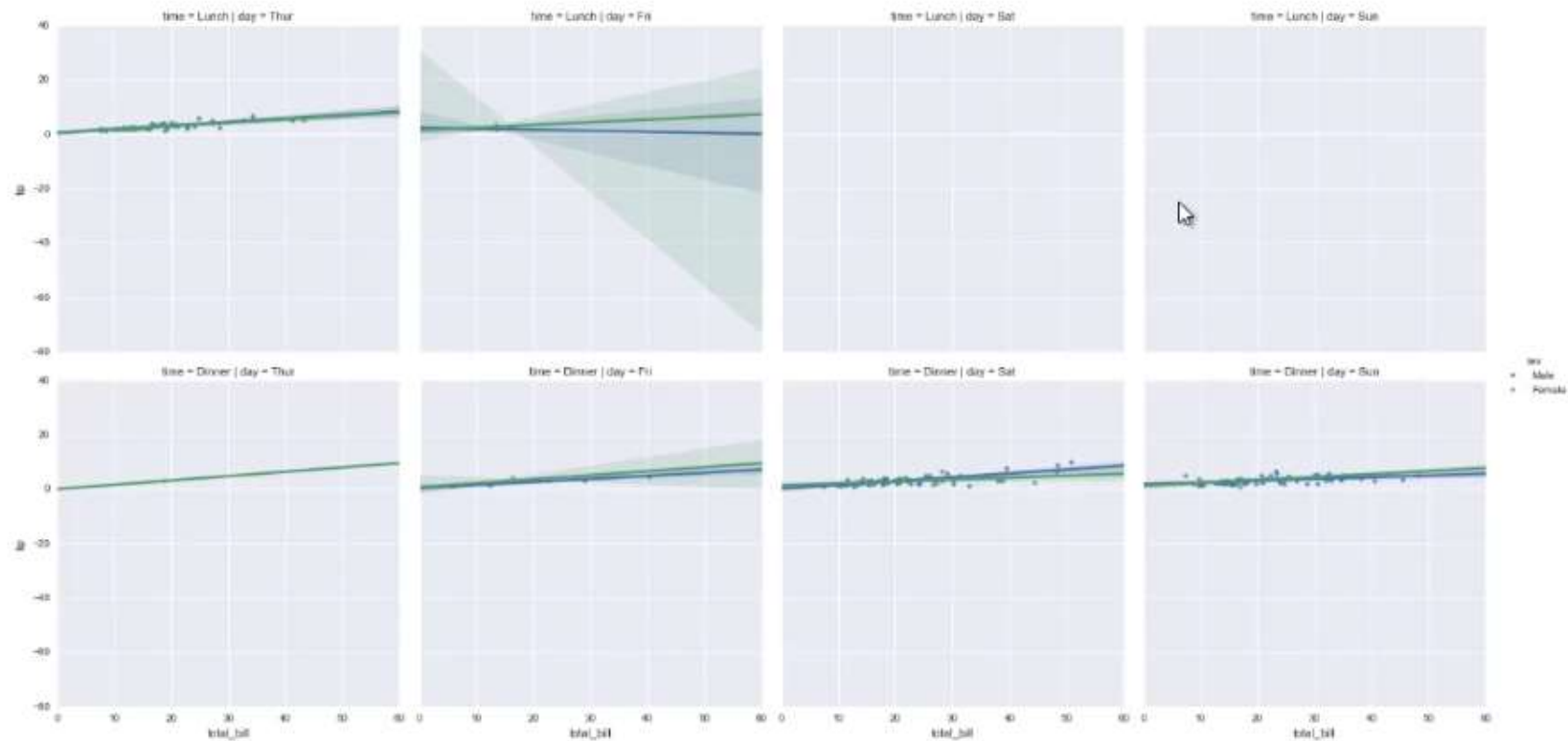




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```
In [114]: sns.lmplot(x='total_bill',y='tip',data=tips,col='day',row='time',hue='sex')
```

```
Out[114]: <seaborn.axisgrid.FacetGrid at 0x254d63624e0>
```

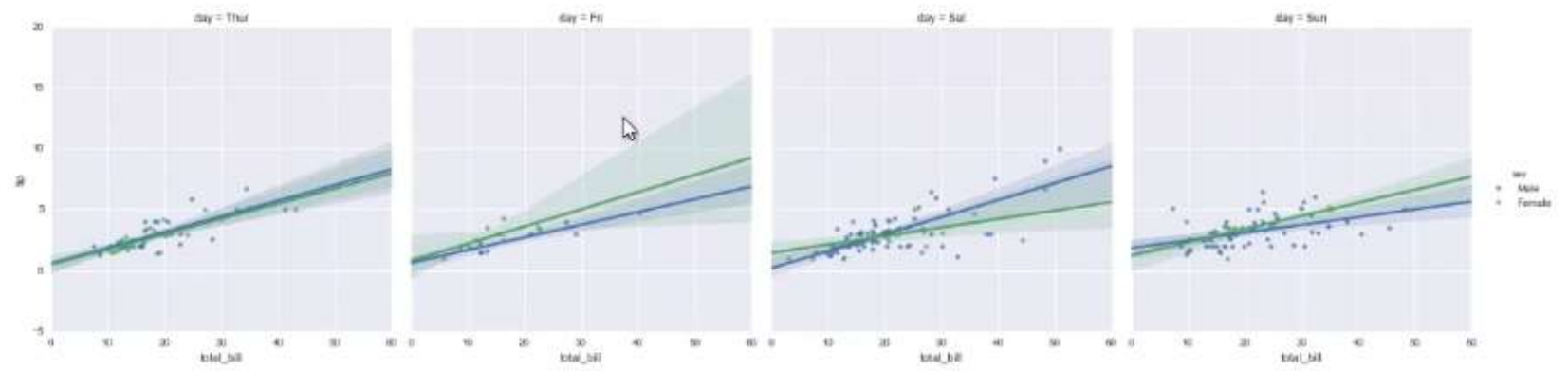


```
In [ ]:
```



In [115]: `sns.lmplot(x='total_bill',y='tip',data=tips,col='day',hue='sex')`

Out[115]: `<seaborn.axisgrid.FacetGrid at 0x254d684bdd8>`

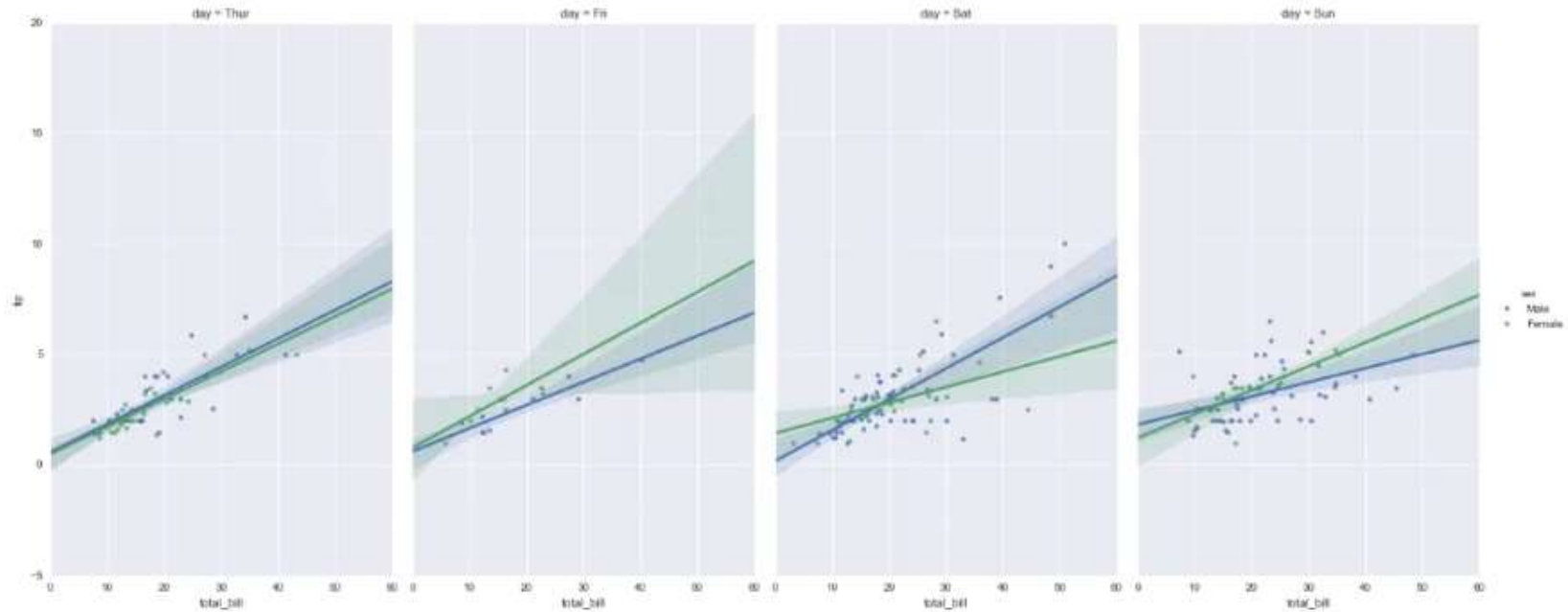


In [ ]:



```
In [116]: sns.lmplot(x='total_bill',y='tip',data=tips,col='day',hue='sex',  
                    aspect=0.6,size=8)
```

```
Out[116]: <seaborn.axisgrid.FacetGrid at 0x254d792c1d0>
```



```
In [ ]:
```