Python for Data Science

Grids

Seaborn

In [84]:
```
import seaborn as sns
%matplotlib inline
iris = sns.load_dataset('iris')
iris.head()
```

Out[84]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

Seaborn

In [92]:
```
import seaborn as sns
%matplotlib inline
iris = sns.load_dataset('iris')
iris.head()
```

Out[92]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [93]:
```
iris['species'].unique()
```

Out[93]:
```
array(['setosa', 'versicolor', 'virginica'], dtype=object)
```

In [ ]:

seaborn

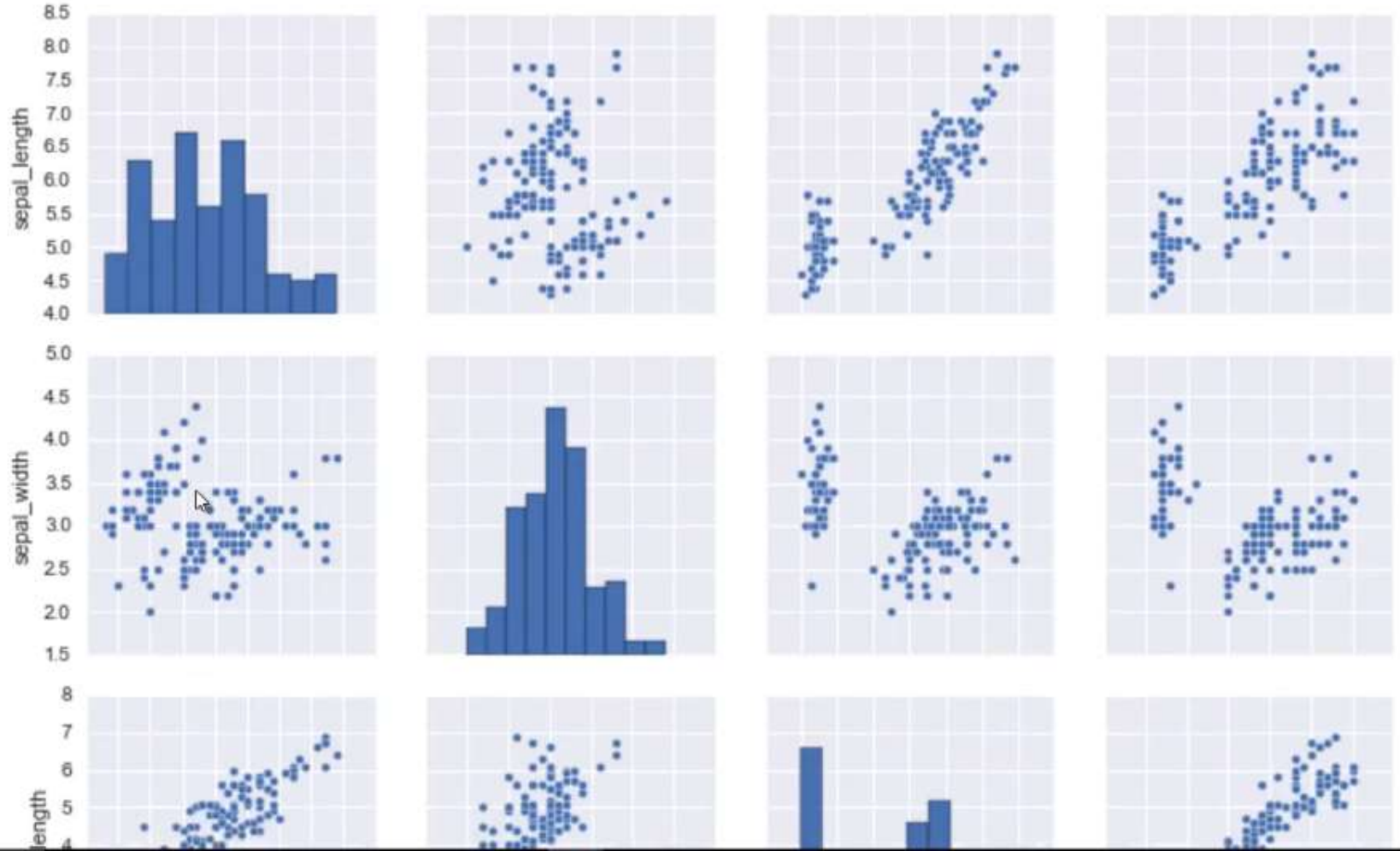
localhost:8888/notebooks/Python-Data-Science-and-Machine-Learning-Bootcamp-master/Python-Data-Science-and-Machine-Learning-Bootcamp-master/Python-for-Data-Visualization/Matplotlib/seaborn.ipynb

jupyter seaborn Last Checkpoint: a minute ago (unsaved changes)

File Edit View Insert Cell Kernel Widgets Help | Python [conda env:py35]

In [94]:
```
sns.pairplot(iris)
```

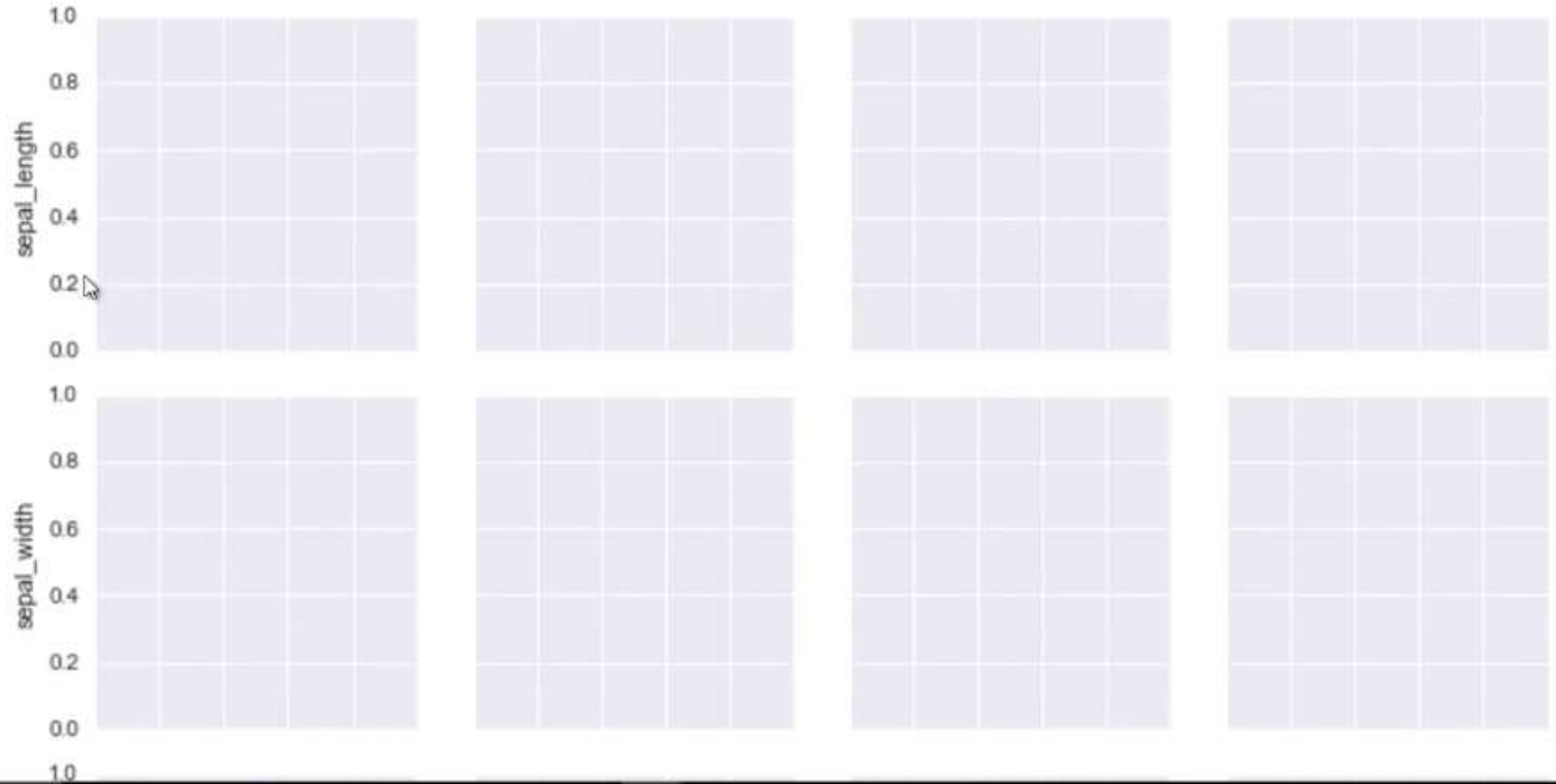
Out[94]: <seaborn.axisgrid.PairGrid at 0x254cf60e898>



2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [95]:
```
sns.PairGrid(iris)
```

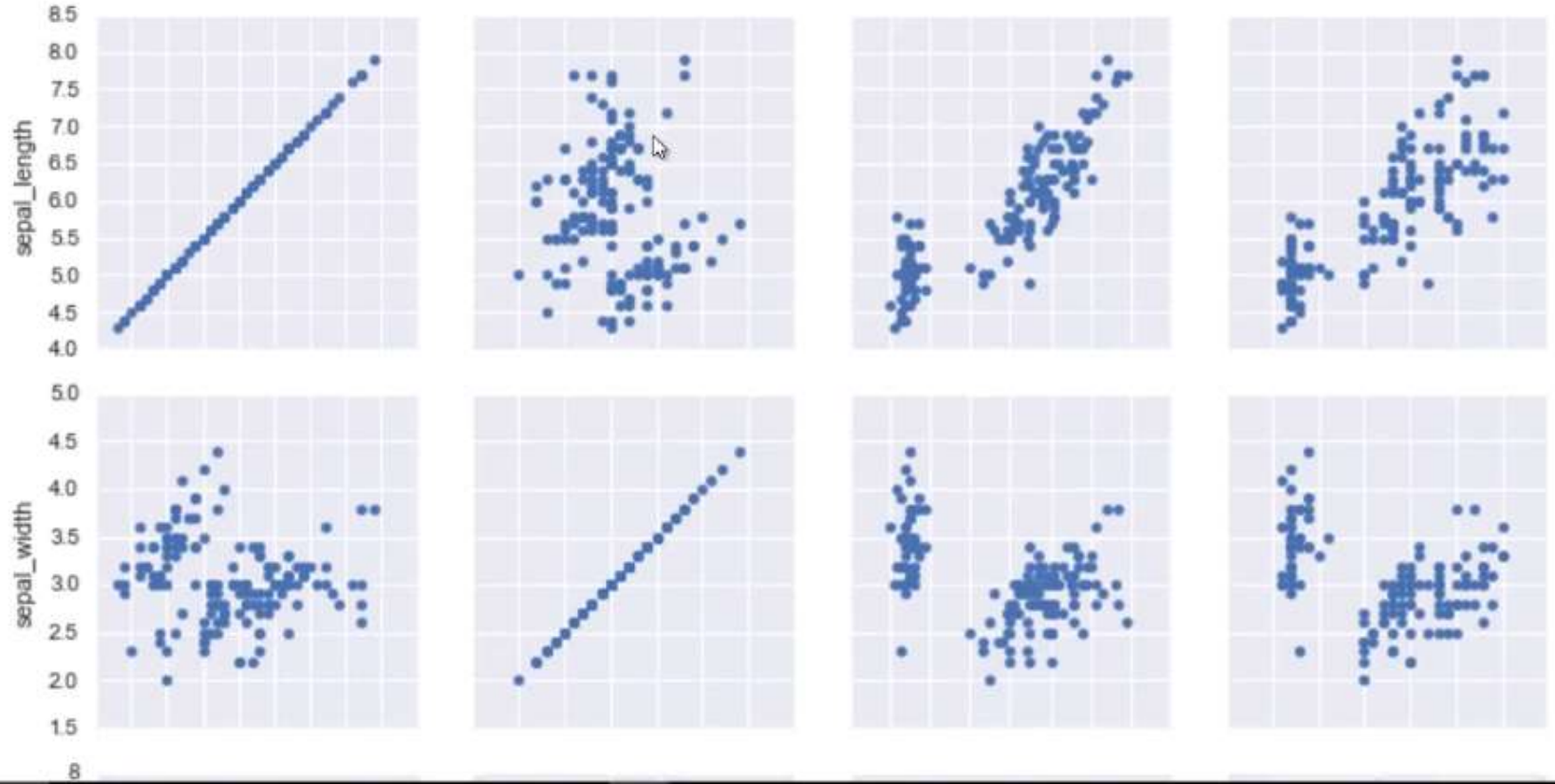
Out[95]: <seaborn.axisgrid.PairGrid at 0x254cf59fa58>



3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [96]:
```
g = sns.PairGrid(iris)
g.map(plt.scatter)
```

Out[96]: <seaborn.axisgrid.PairGrid at 0x254cf21c208>



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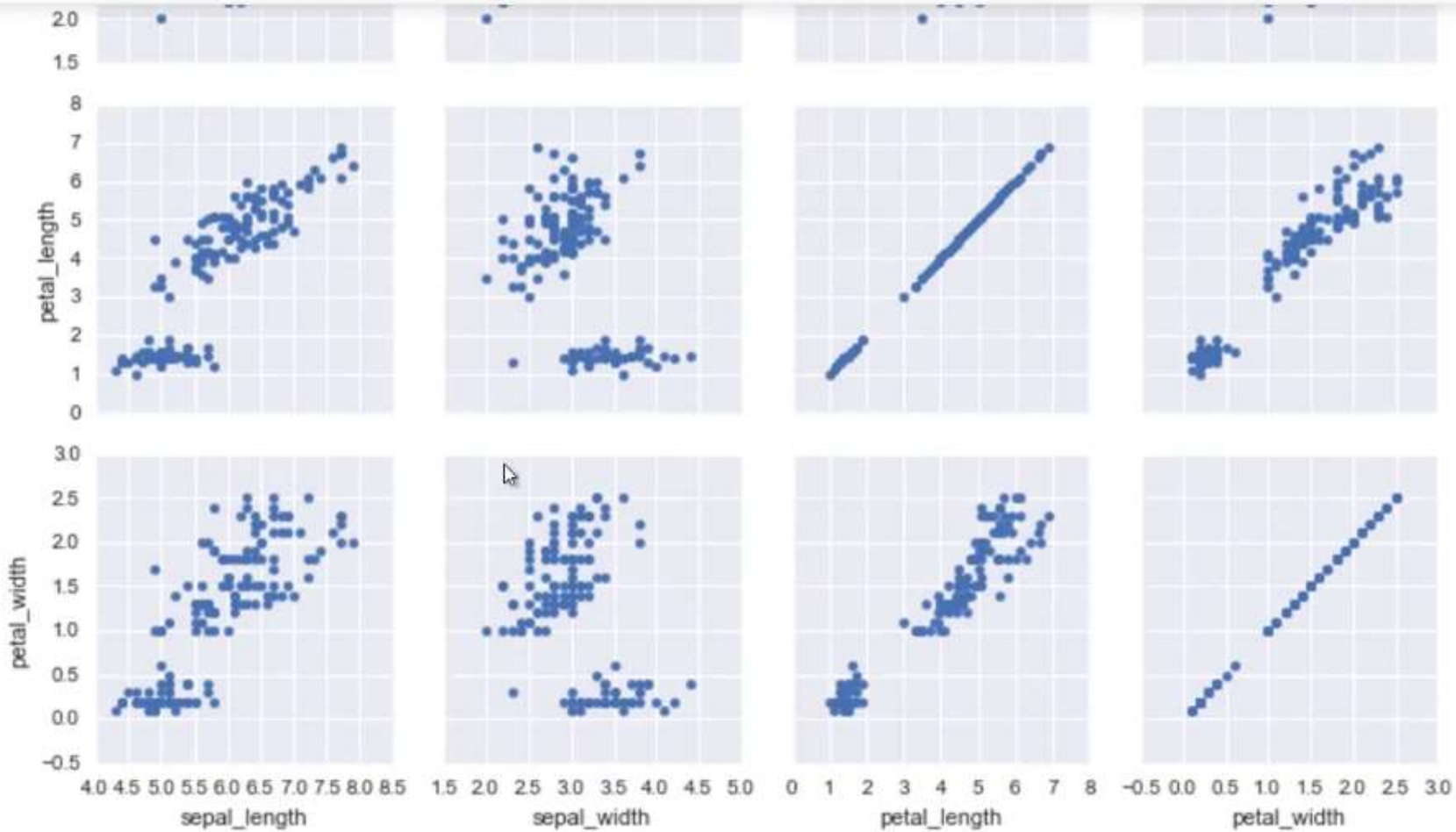
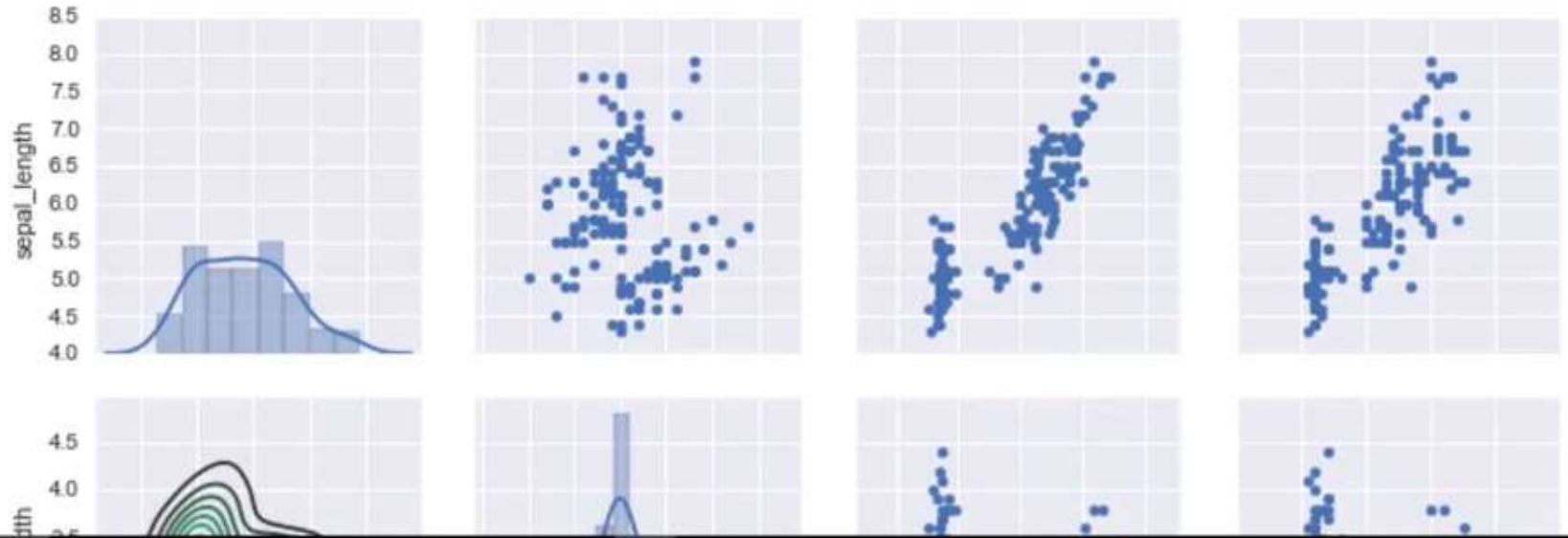


In [ ]:

0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [97]:
```
g = sns.PairGrid(iris)
g.map_diag(sns.distplot)
g.map_upper(plt.scatter)
g.map_lower(sns.kdeplot)
```

Out[97]: <seaborn.axisgrid.PairGrid at 0x254d2ace9e8>



seaborn

localhost:8888/notebooks/Python-Data-Science-and-Machine-Learning-Bootcamp-master/Python-Data-Science-and-Machine-Learning-Bootcamp-master/Python-for-Data-Visualization/Matplotlib/seaborn.ipynb

jupyter seaborn Last Checkpoint: 3 minutes ago (unsaved changes)

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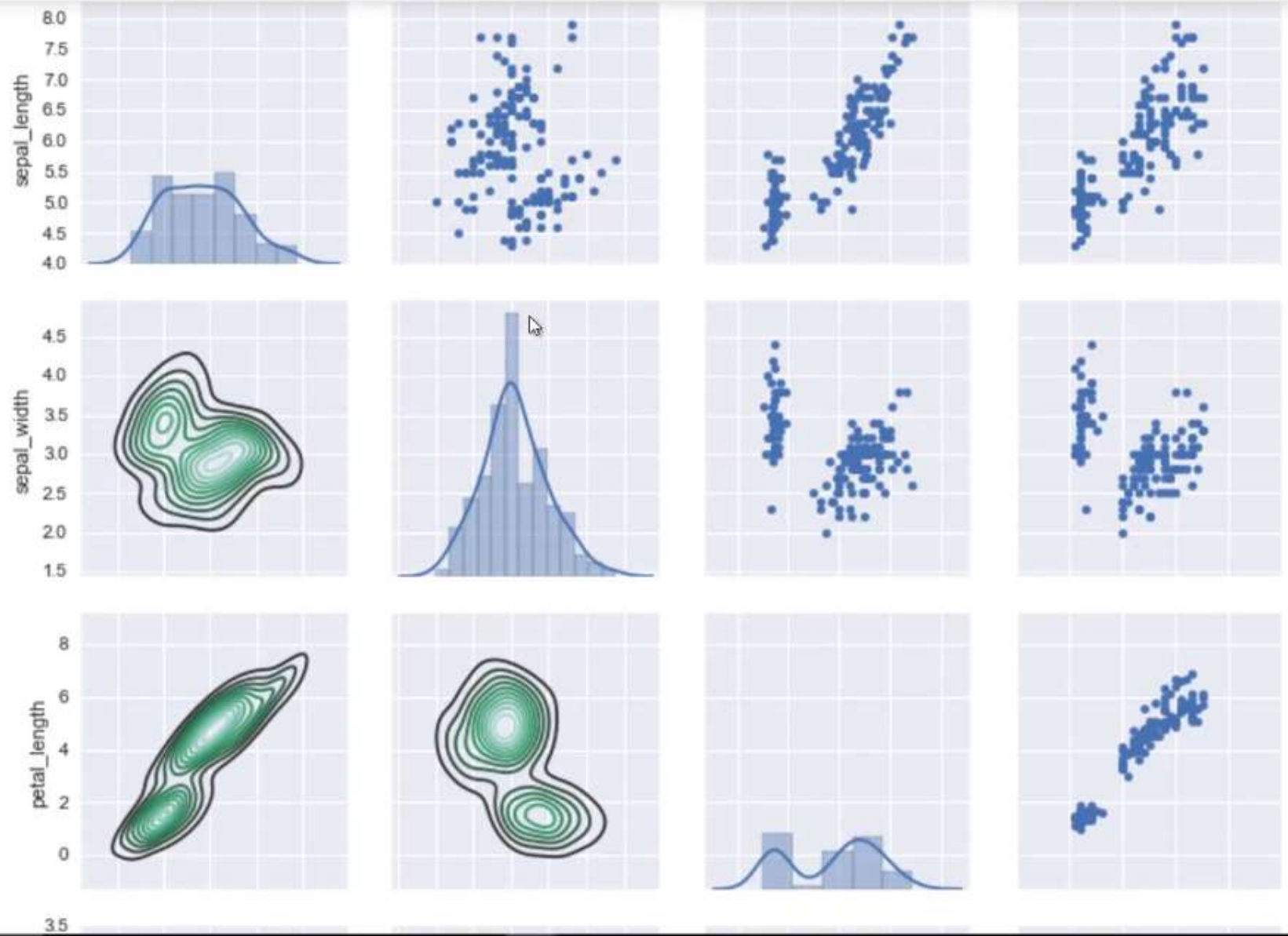


2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [98]:
```
tips = sns.load_dataset('tips')
```

In [99]:
```
tips.head()
```

Out[99]:

	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 [ ]:

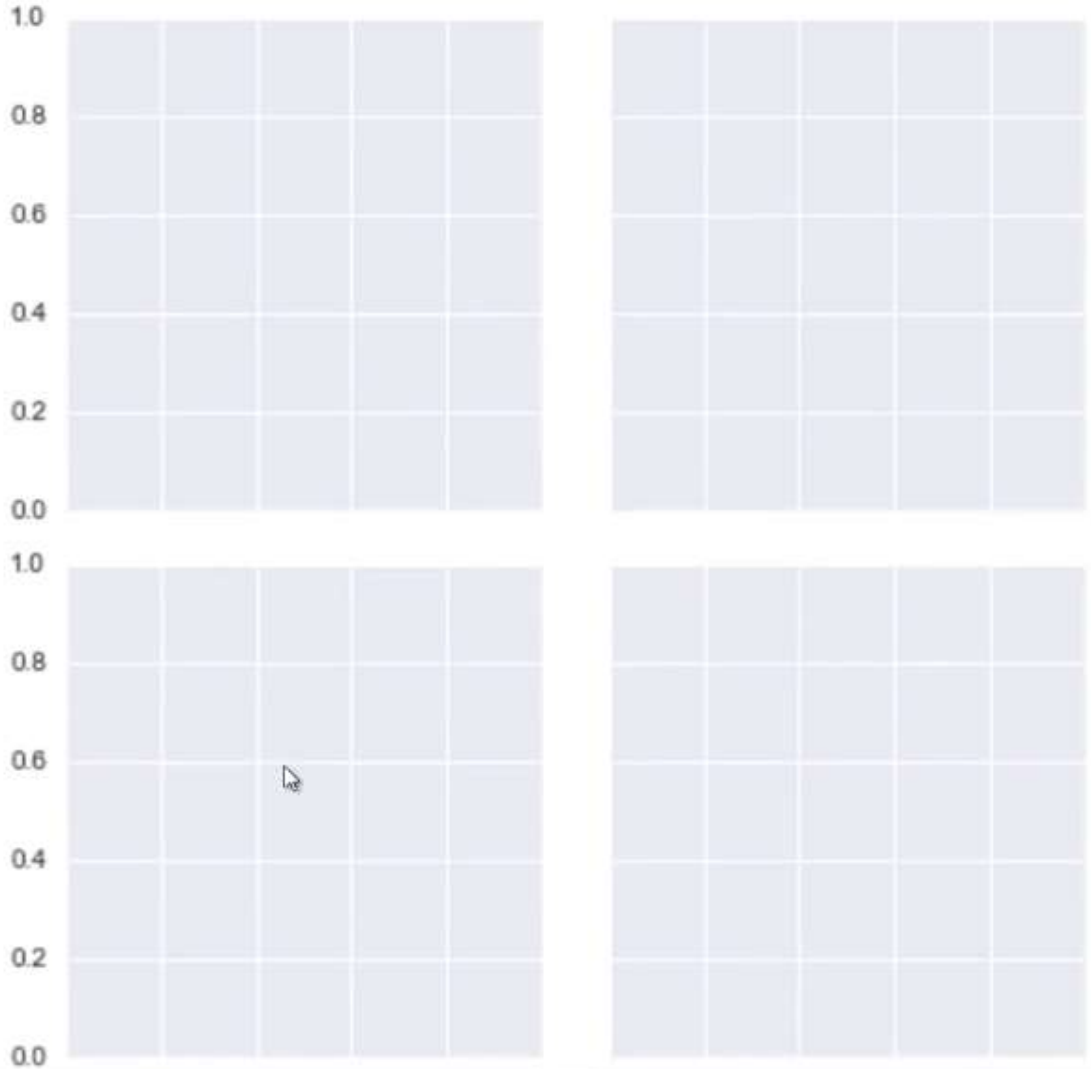
seaborn

localhost:8888/notebooks/Python-Data-Science-and-Machine-Learning-Bootcamp-master/Python-Data-Science-and-Machine-Learning-Bootcamp-master/Python-for-Data-Visualization/Matplotlib/seaborn.ipynb

jupyter seaborn (unsaved changes)

File Edit View Insert Cell Kernel Widgets Help Python [conda env:py35]

In [100]:
```
g = sns.FacetGrid(data=tips,col='time',row='smoker')
```

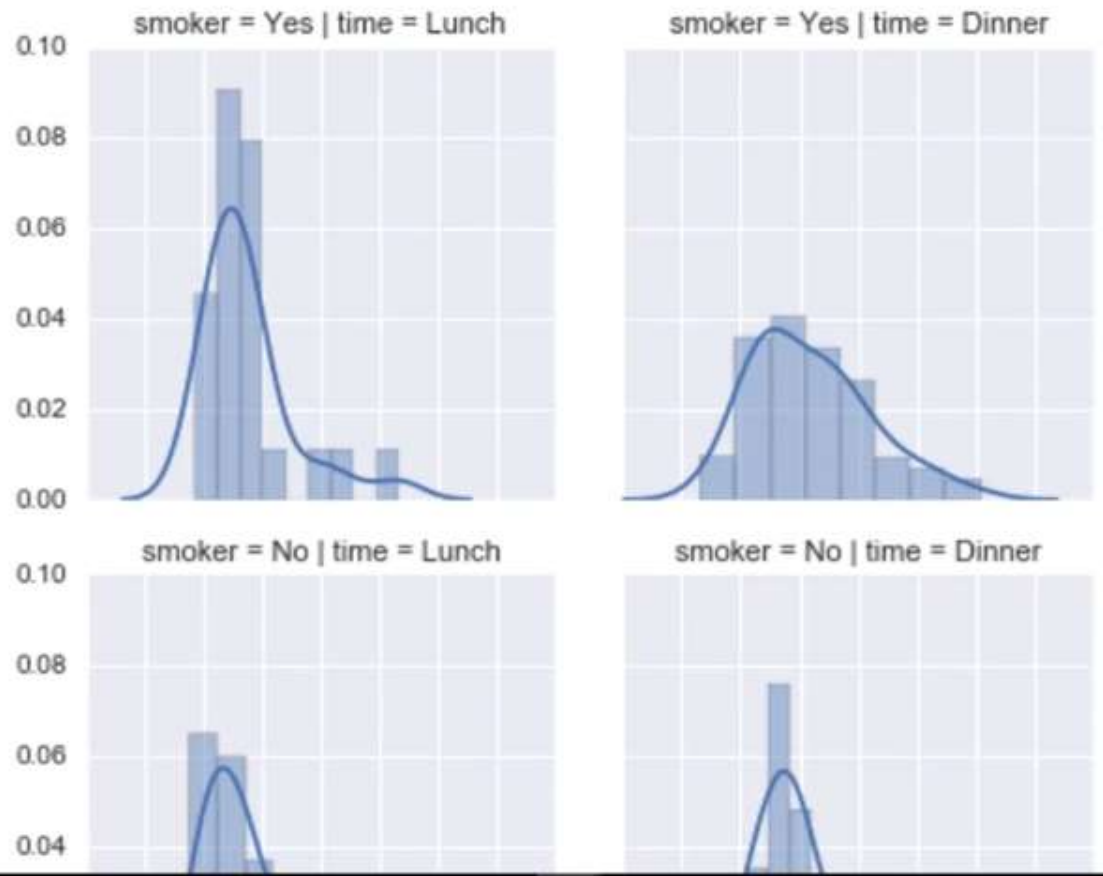


jupyter seaborn (unsaved changes)

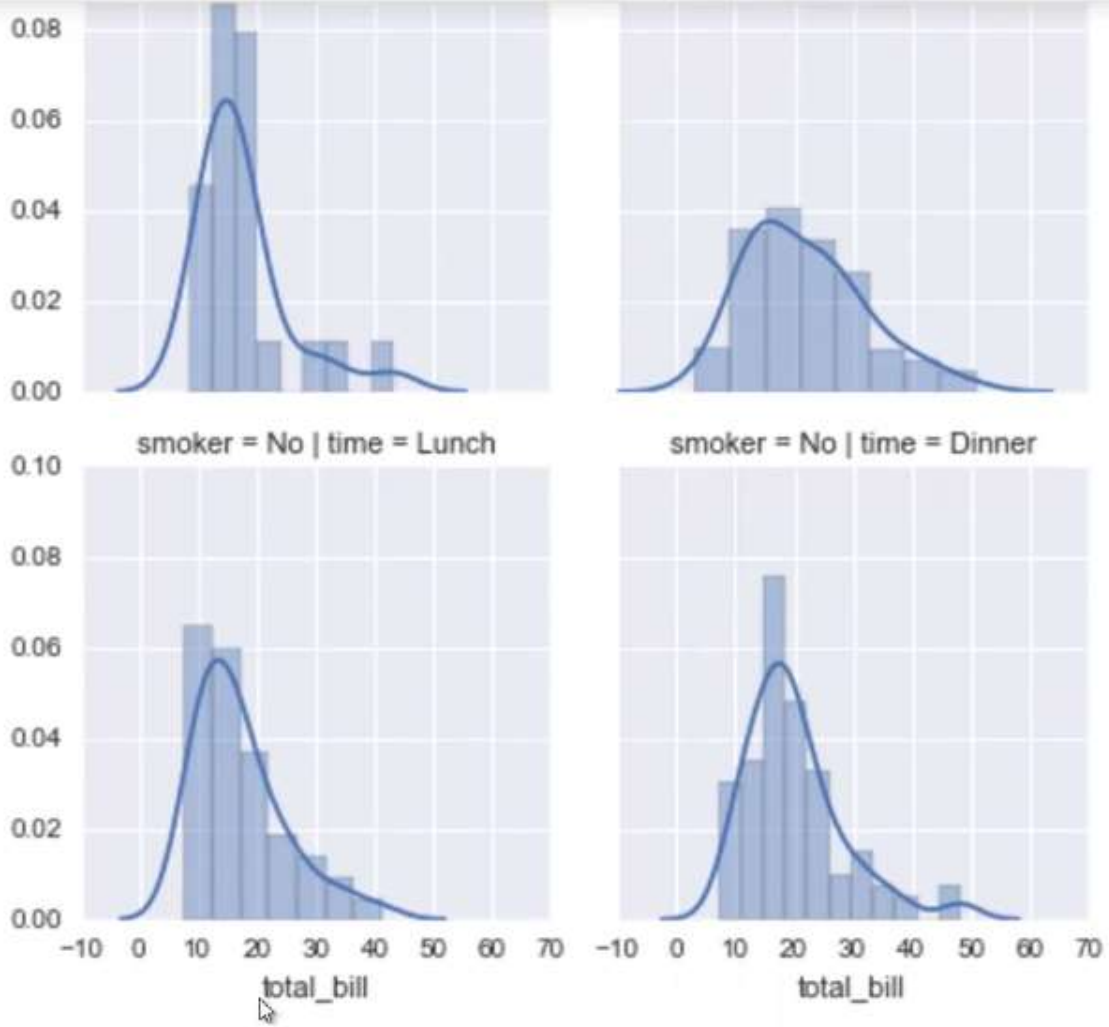
File Edit View Insert Cell Kernel Widgets Help Python [conda env:py35]

In [101]:
```
g = sns.FacetGrid(data=tips,col='time',row='smoker')
g.map(sns.distplot,'total_bill')
```

Out[101]: <seaborn.axisgrid.FacetGrid at 0x254d47454a8>



jupyter seaborn (unsaved changes)

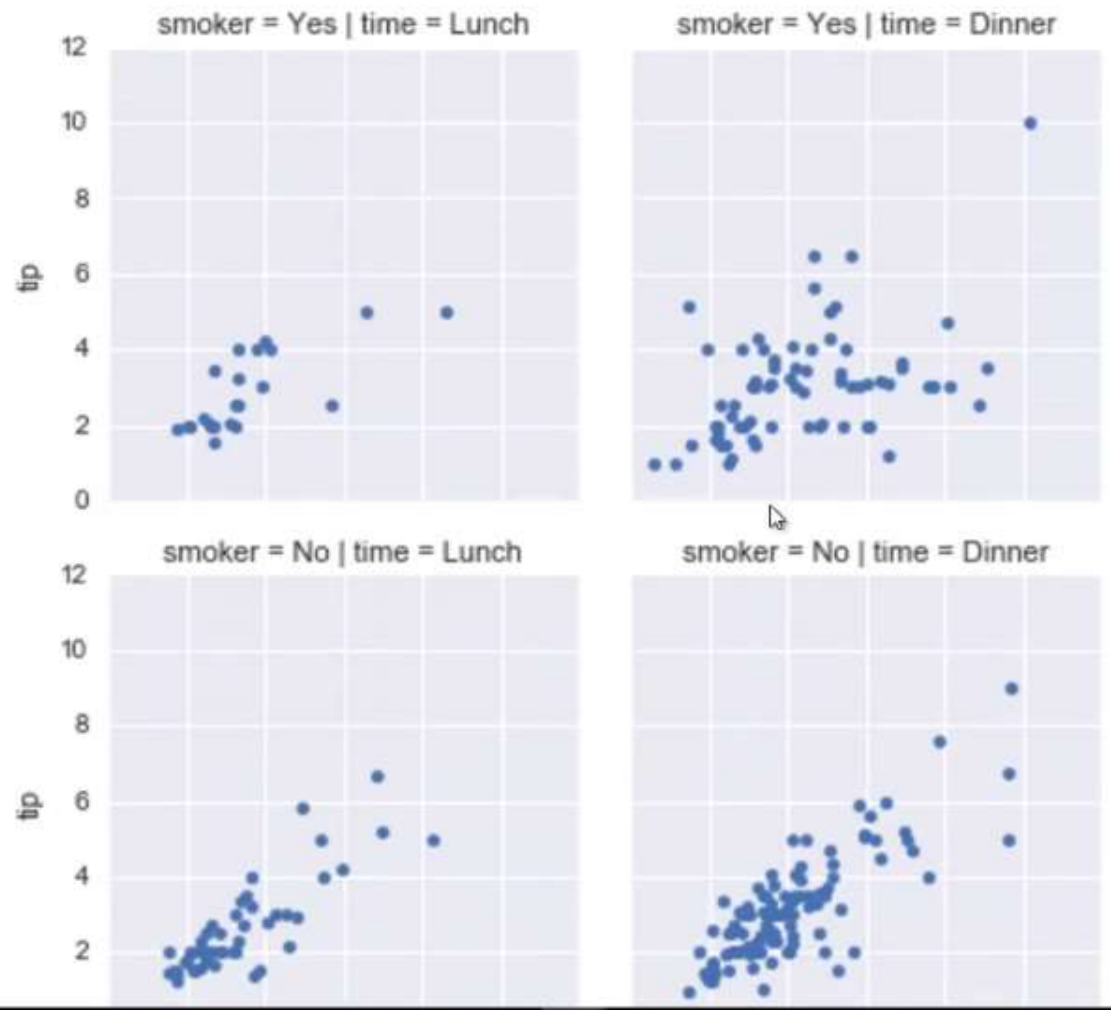


In [ ]:

jupyter seaborn (unsaved changes)


```
g.map(plt.scatter,'total_bill','tip')
```

Out[104]: <seaborn.axisgrid.FacetGrid at 0x254d49d1710>



seaborn

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jupyter seaborn (unsaved changes)

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In [104]:
```
g = sns.FacetGrid(data=tips,col='time',row='smoker')
g.map(plt.scatter,'total_bill','tip')
```

Out[104]: <seaborn.axisgrid.FacetGrid at 0x254d49d1710>