Using Seaborn To Visualize A Pandas Dataframe

01 December 2016

Preliminaries

```
import pandas as pd
%matplotlib inline
import random
import matplotlib.pyplot as plt
import seaborn as sns
```

```
df = pd.DataFrame()

df['x'] = random.sample(range(1, 100), 25)
df['y'] = random.sample(range(1, 100), 25)
```

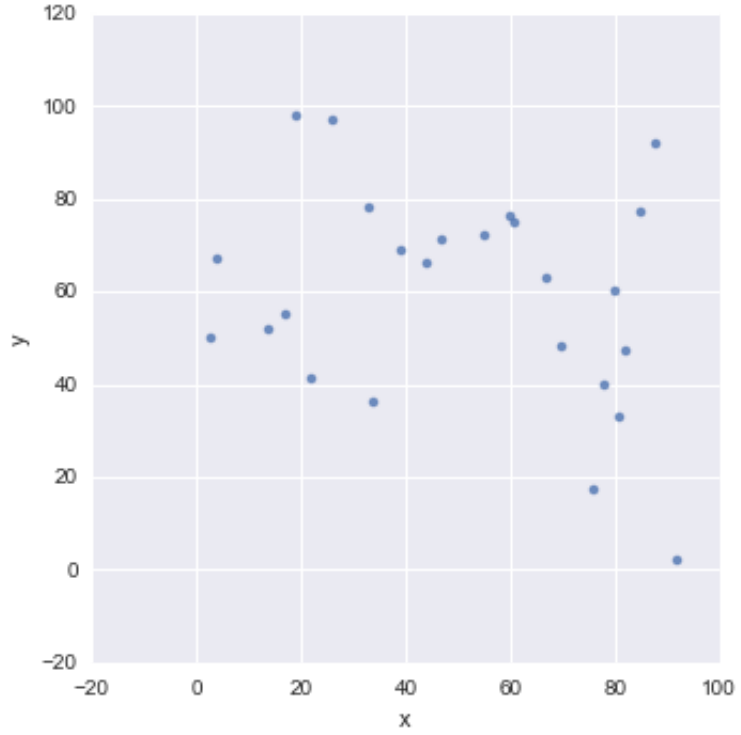
```
df.head()
```

	x	y
0	14	52
1	88	92
2	39	69
3	19	98
4	60	76

Scatterplot

```
sns.lmplot('x', 'y', data=df, fit_reg=False)
```

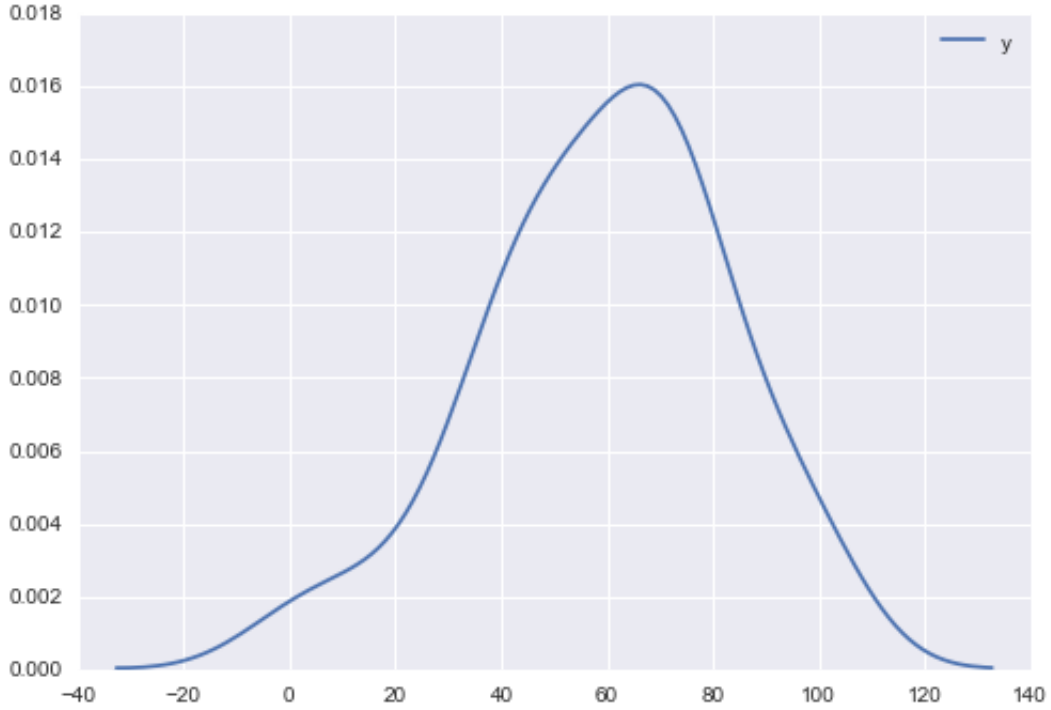
```
<seaborn.axisgrid.FacetGrid at 0x10dc2b1d0>
```



Density Plot

```
sns.kdeplot(df.y)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x10c30e050>
```

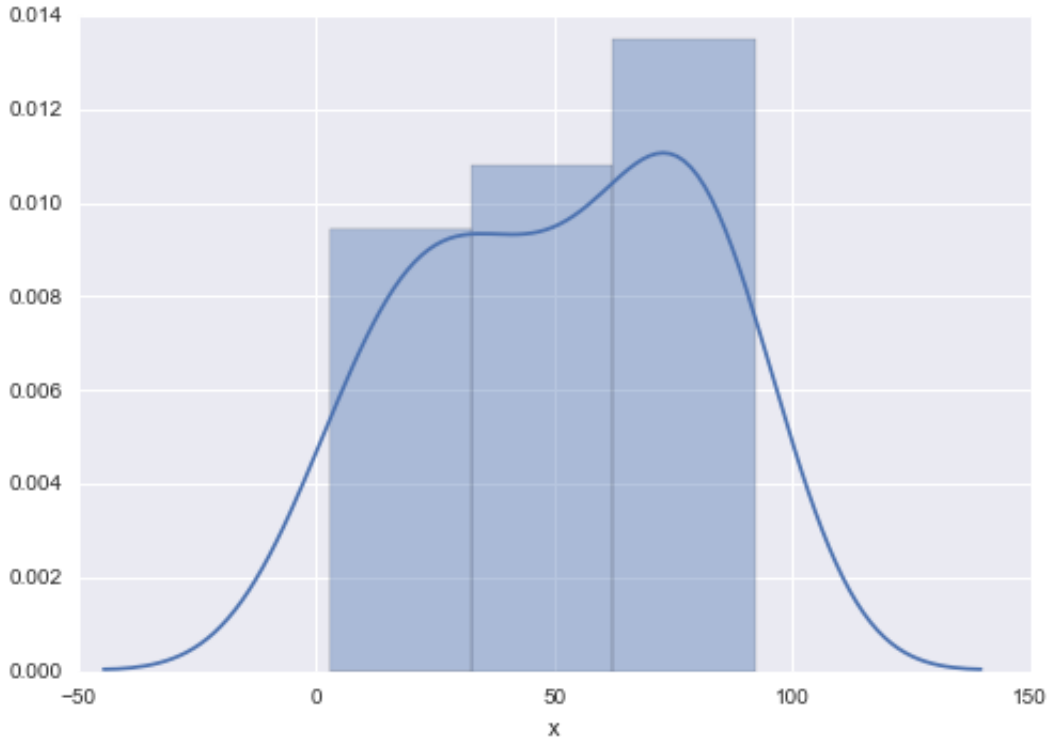



```
sns.kdeplot(df.y, df.x)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x10c5536d0>
```

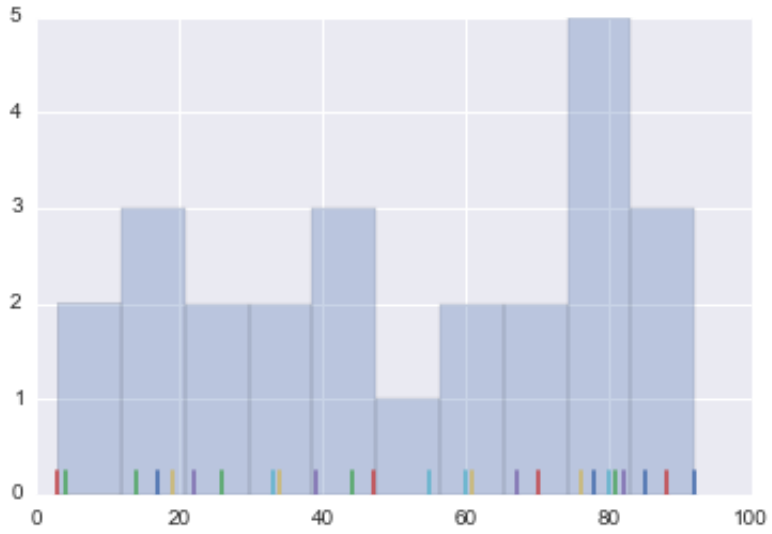

```
sns.distplot(df.x)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x10b669550>
```



Histogram

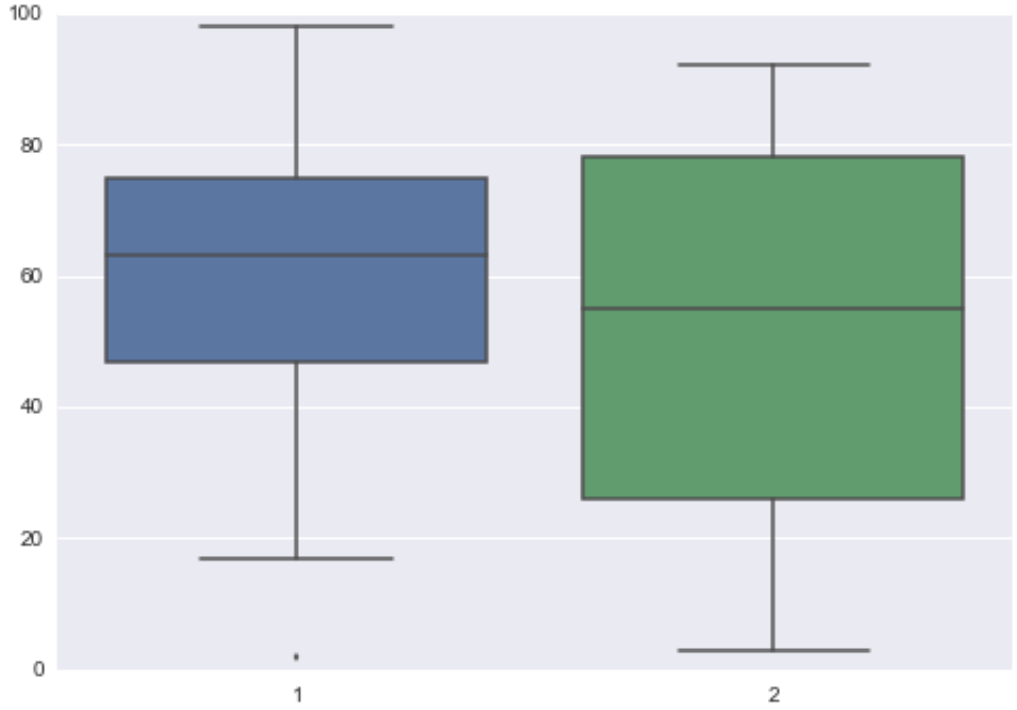
```
plt.hist(df.x, alpha=.3)
sns.rugplot(df.x);
```



Boxplot

```
sns.boxplot([df.y, df.x])
```

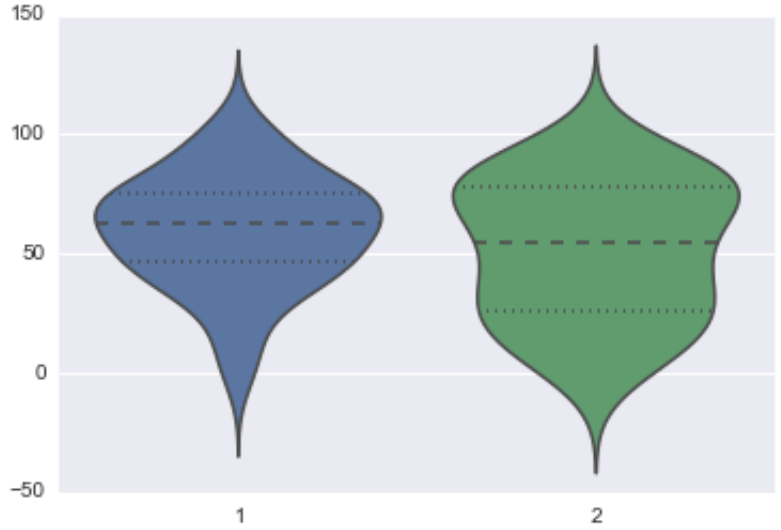
```
<matplotlib.axes._subplots.AxesSubplot at 0x10a5c9b50>
```



Violin Plot

```
sns.violinplot([df.y, df.x])
```

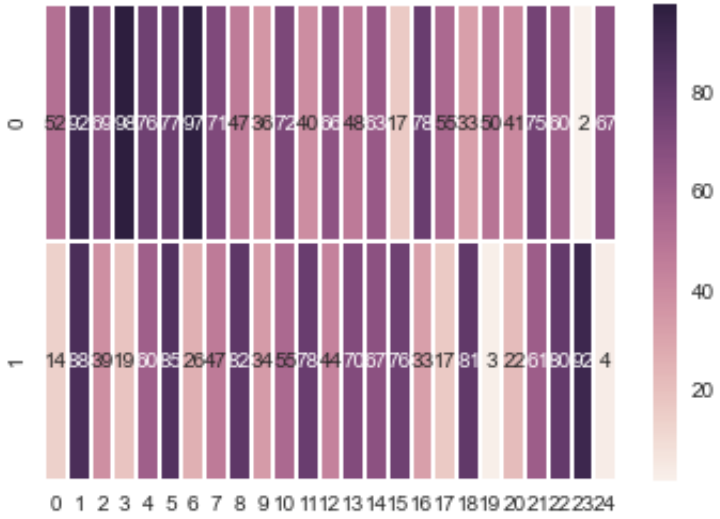
```
<matplotlib.axes._subplots.AxesSubplot at 0x10dca4b50>
```



Heatmap

```
sns.heatmap([df.y, df.x], annot=True, fmt="d")
```

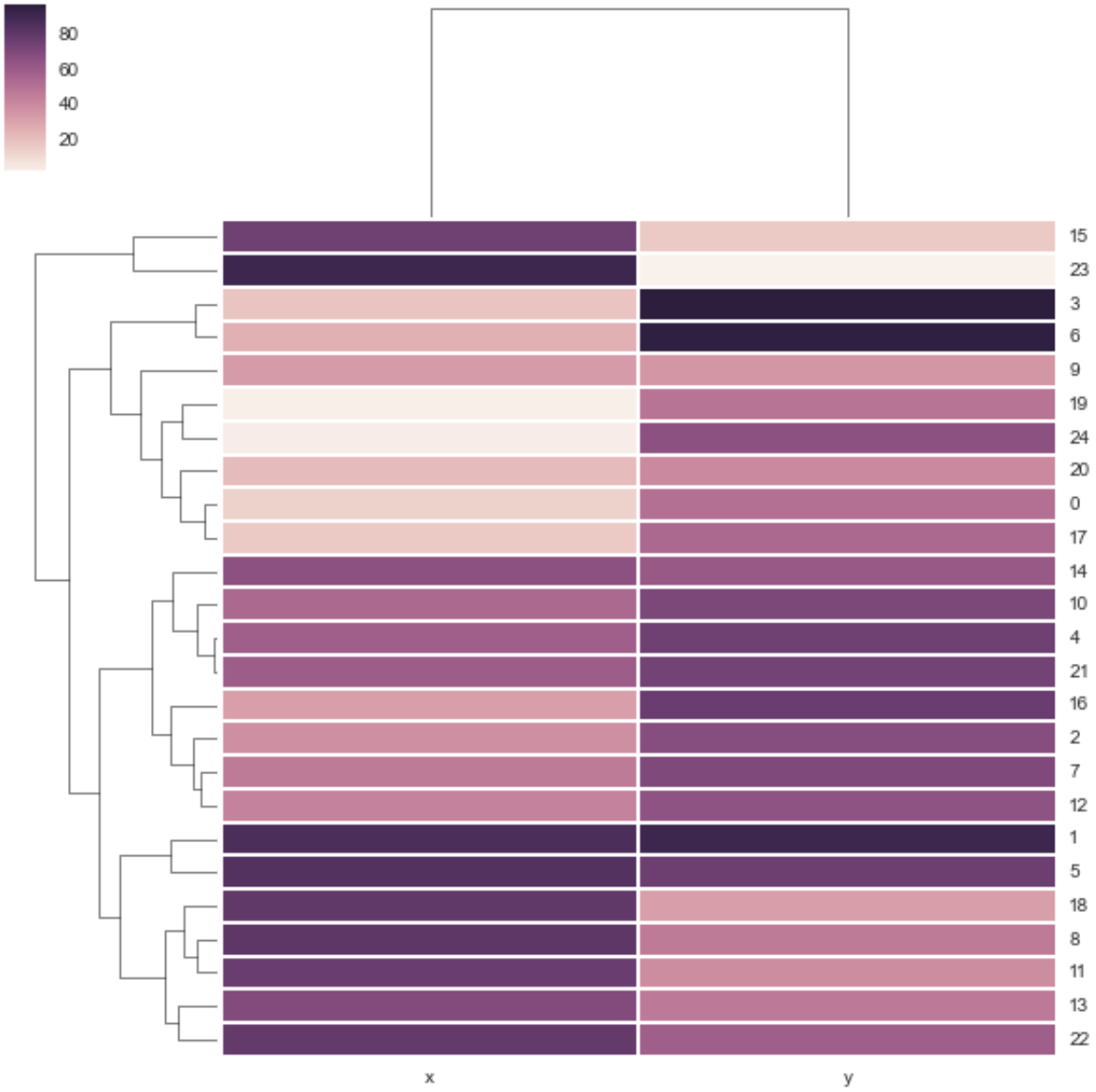
```
<matplotlib.axes._subplots.AxesSubplot at 0x10dab5110>
```



Clustermap

```
sns.clustermap(df)
```

```
<seaborn.matrix.ClusterGrid at 0x10de304d0>
```



Find an error or bug? Have a suggestion?

Everything on this site is avaliable on GitHub. Head on over and submit an issue. (https://github.com/chrisalbon/peripheral_brain/blob/gh-pages/python/pandas_with_seaborn.html) You can also message me directly on Twitter (https://twitter.com/chrisalbon).
