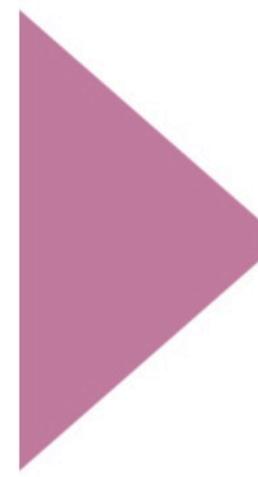




Data Visualization with Python

Session-5





Seaborn-3



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- ▶ Categorical Plots
- ▶ Comparison Plots
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► Categorical Plots - catplot

catplot

kind =

barplot

violinplot

stripplot

swarmplot

boxplot

► Categorical Plots - catplot



catplot

kind =

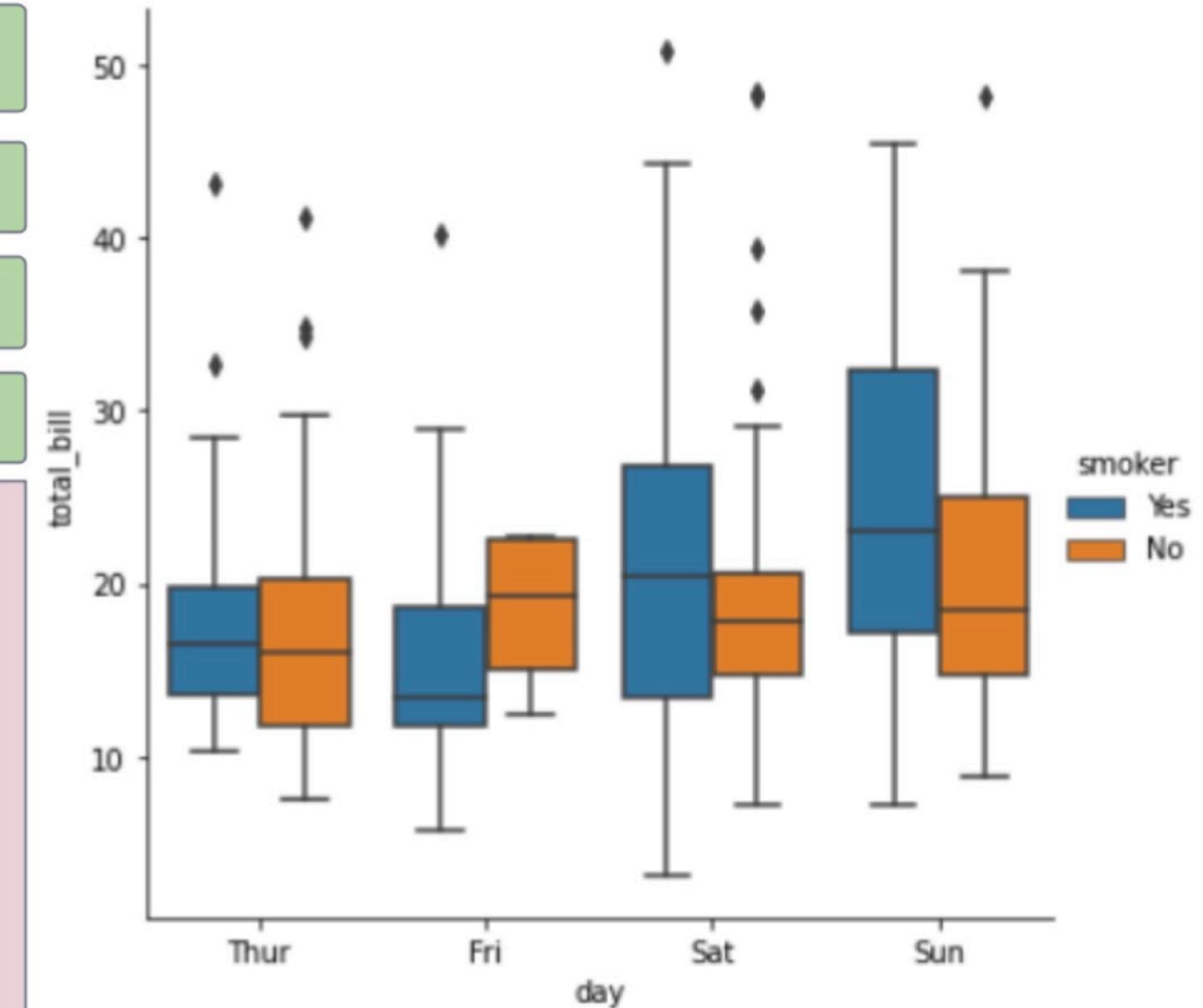
box

violin

swarm

bar

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.catplot(y='total_bill', x="day",  
kind="box", data=tips, hue="smoker")
```



► Categorical Plots - catplot



catplot

kind =

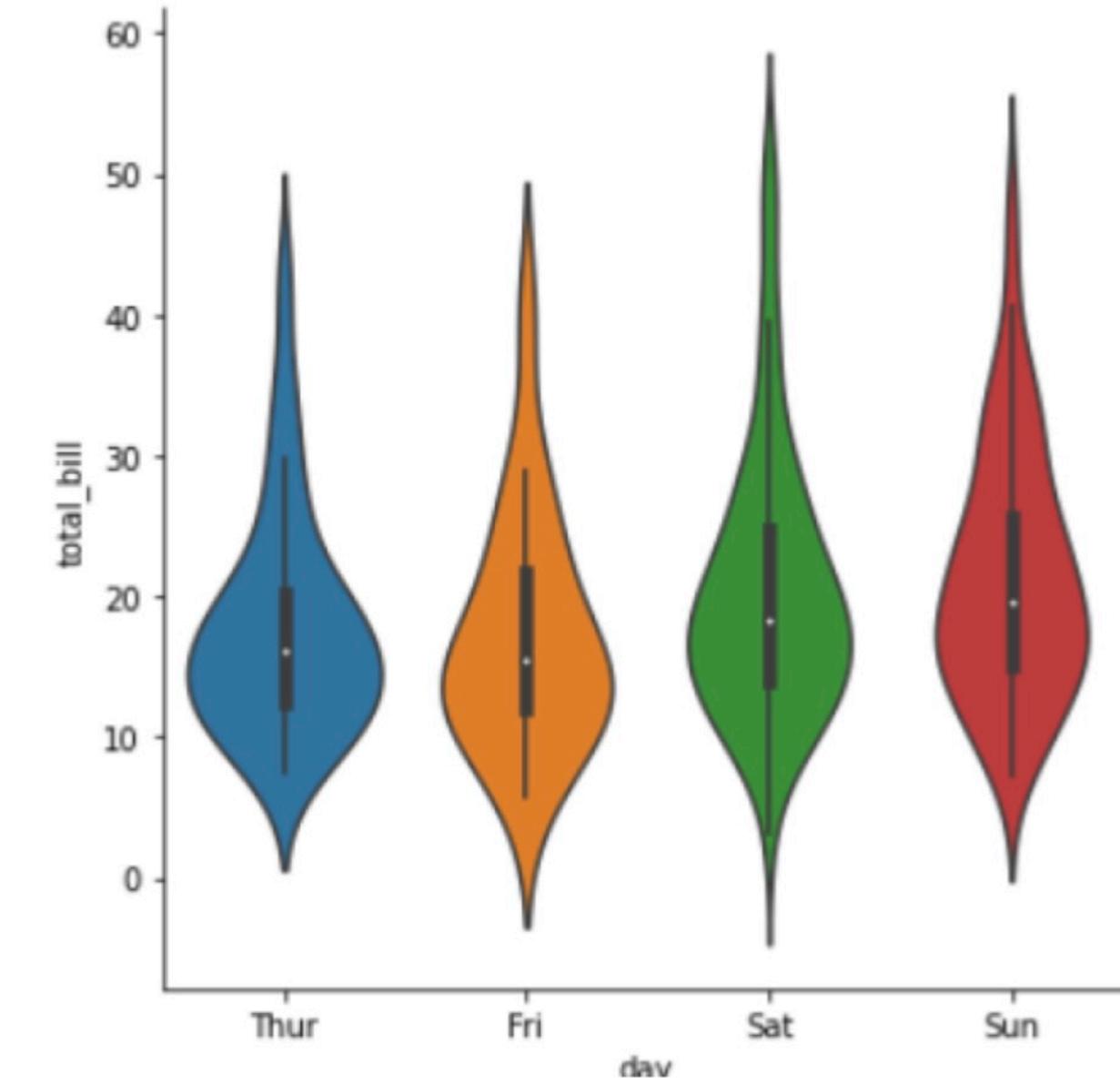
box

violin

swarm

bar

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.catplot(y='total_bill', x="day",  
             kind="violin", data=tips)
```



► Categorical Plots - catplot

catplot

kind =

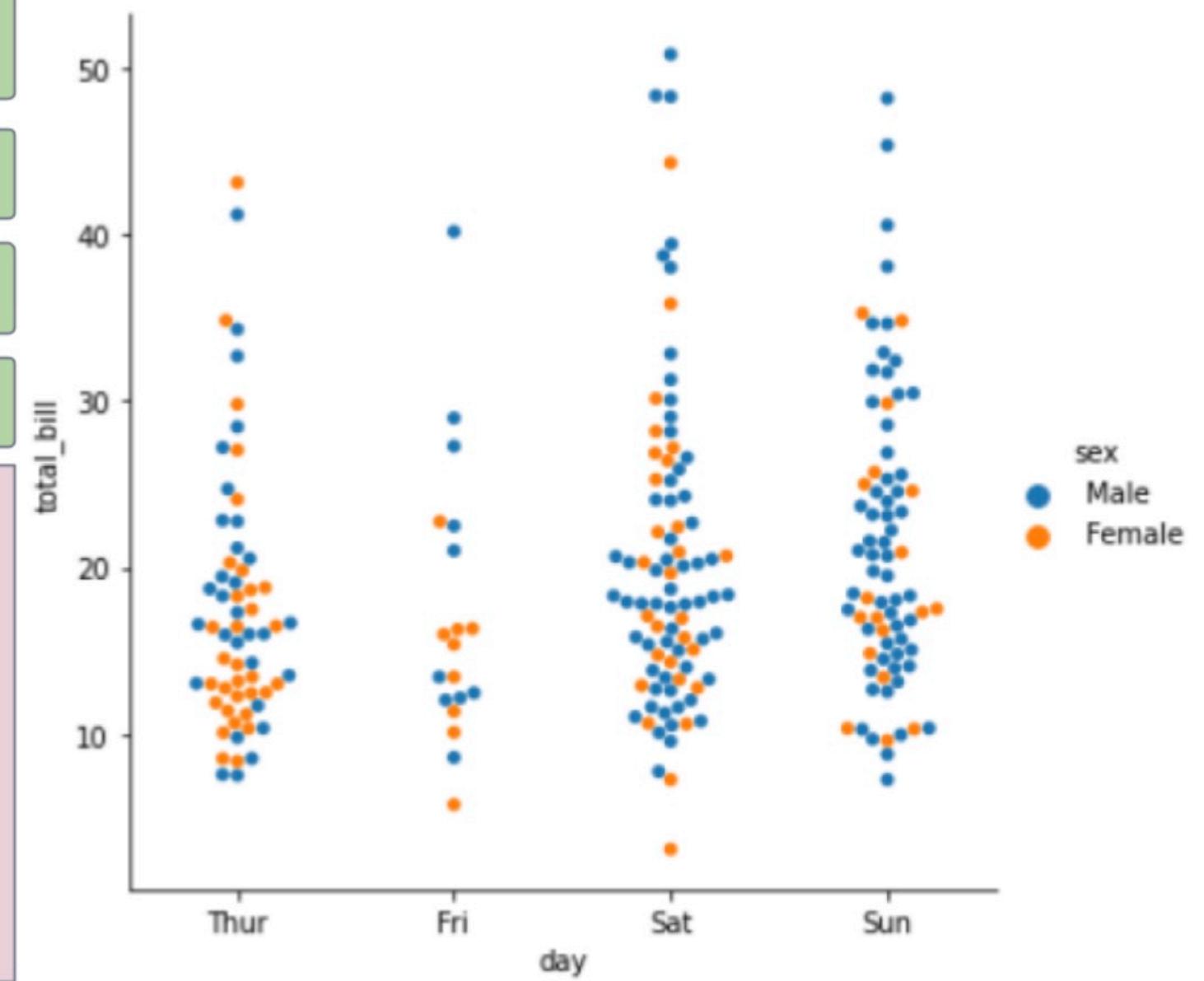
box

violin

swarm

bar

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.catplot(x="day", y='total_bill',  
            data=tips, kind="swarm", hue="sex")
```



► Categorical Plots - catplot



catplot

kind =

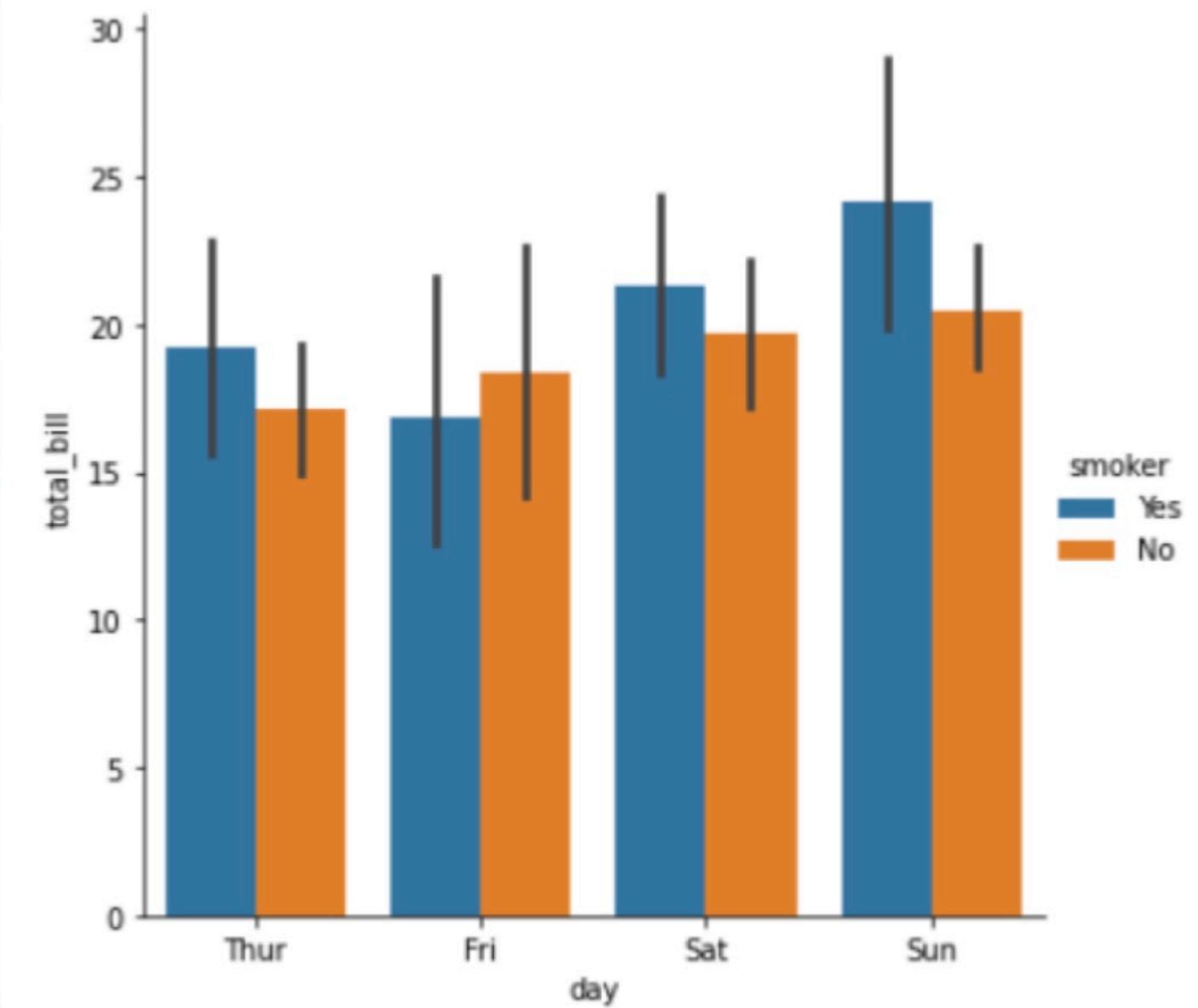
box

violin

swarm

bar

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.catplot(x="day", y='total_bill',  
kind="bar", data=tips, hue="smoker")
```

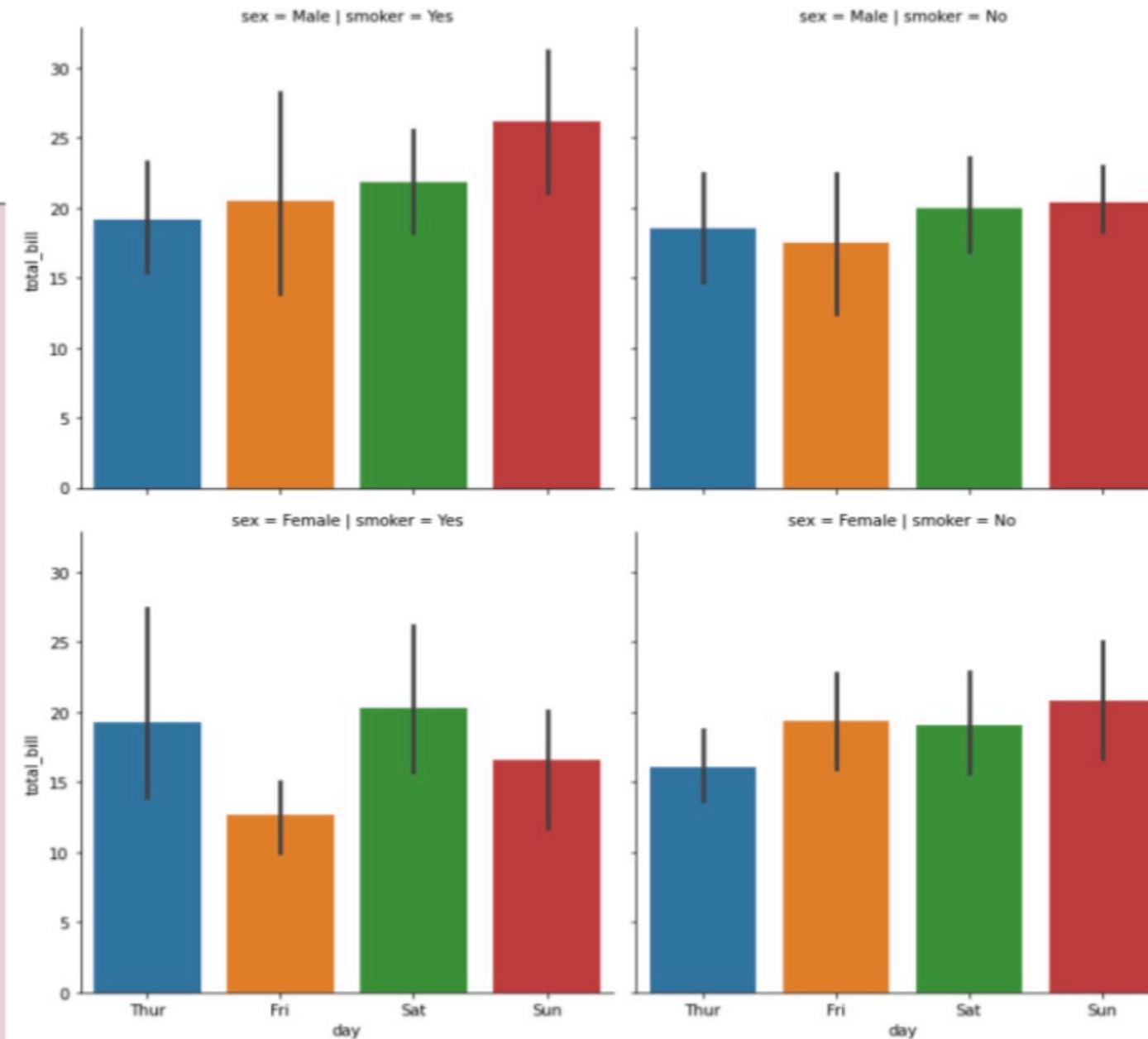


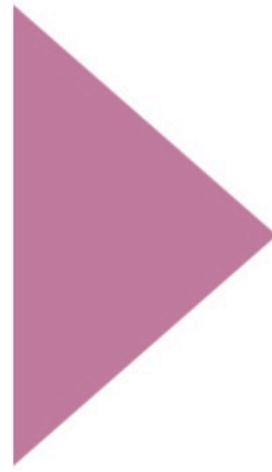
► Categorical Plots - catplot



catplot & grid

```
import seaborn as sns  
  
tips =  
sns.load_dataset("tips")  
  
sns.catplot(data=tips,  
  
            x="day",  
  
            y='total_bill',  
  
            kind="bar",  
  
            col="smoker",  
  
            row="sex")
```





Comparison Plots

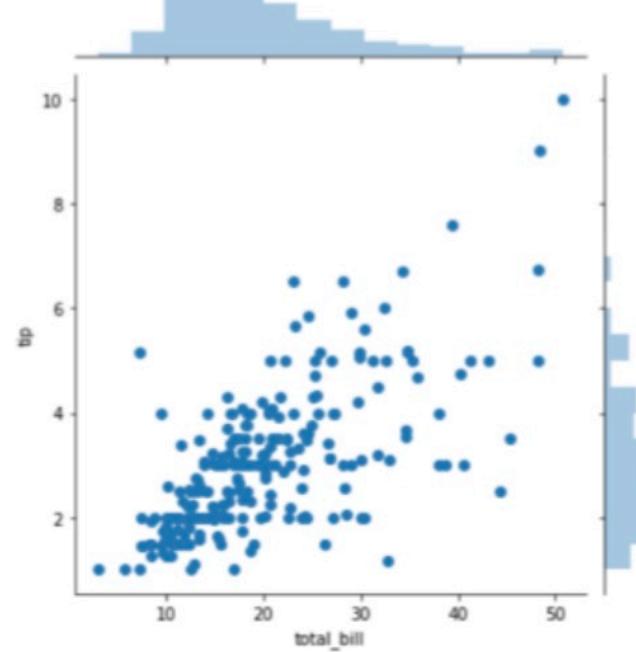


► Comparison Plots

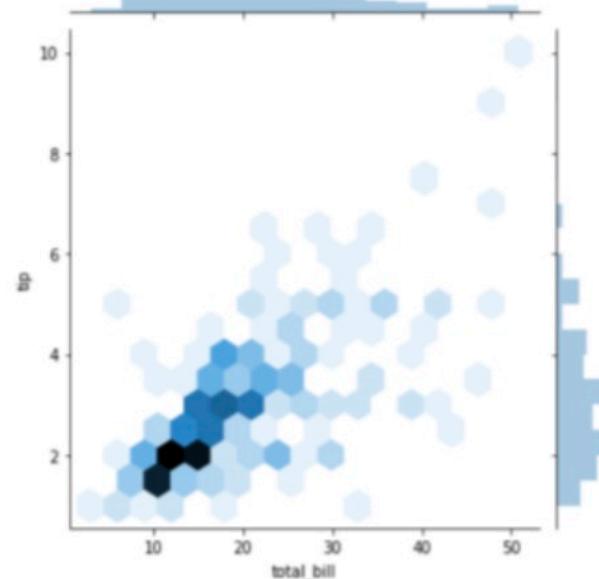


jointplot

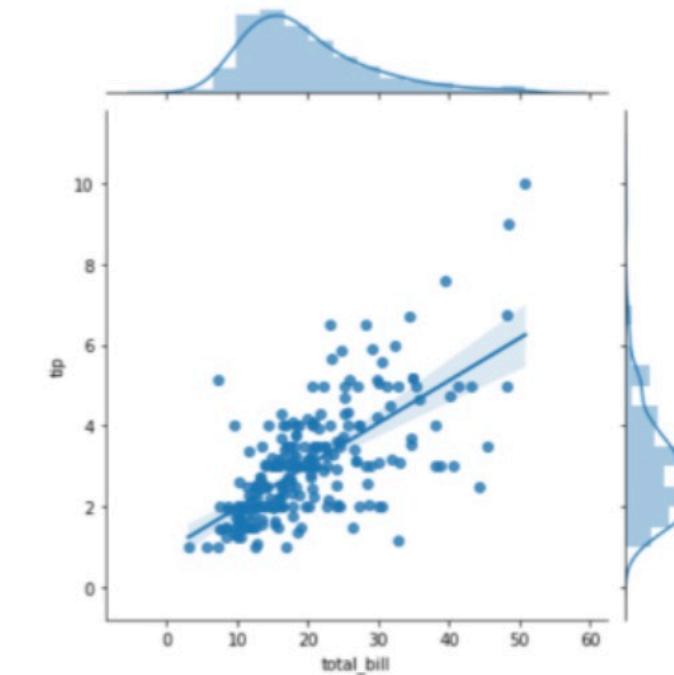
scatter



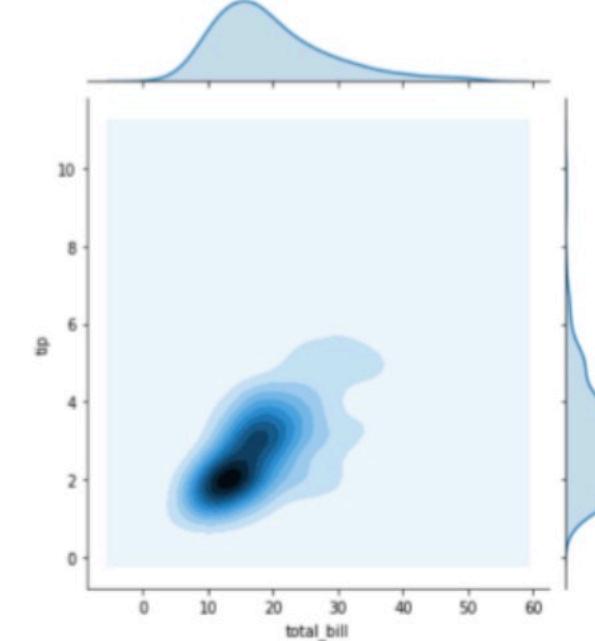
hex



reg



kde



► Comparison Plots - jointplot

jointplot

kind =

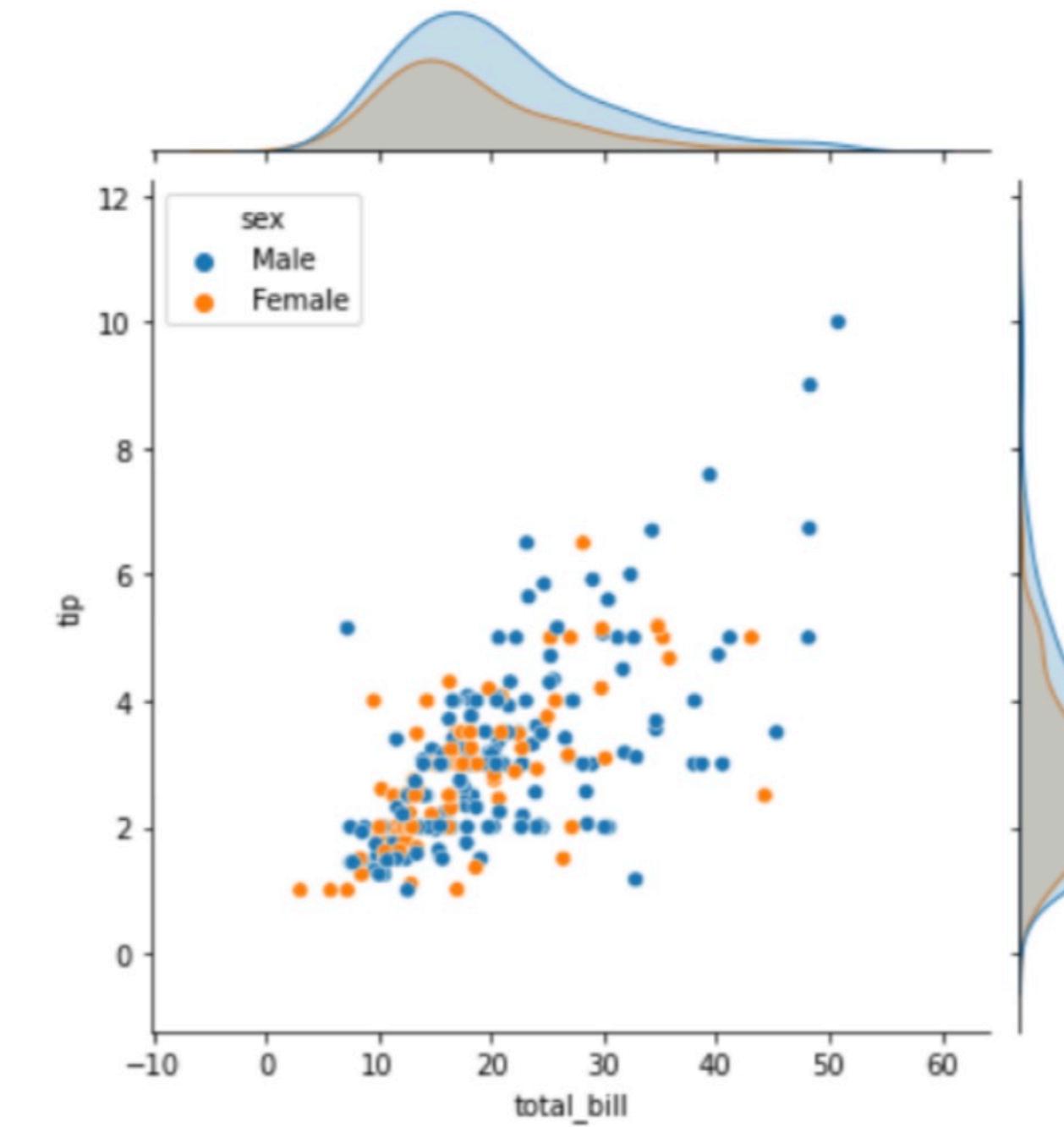
scatter

reg

kde

hex

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.jointplot(x='total_bill',  
y="tip", kind="scatter", data=tips,  
hue="sex")
```



► Comparison Plots - jointplot

jointplot

kind =

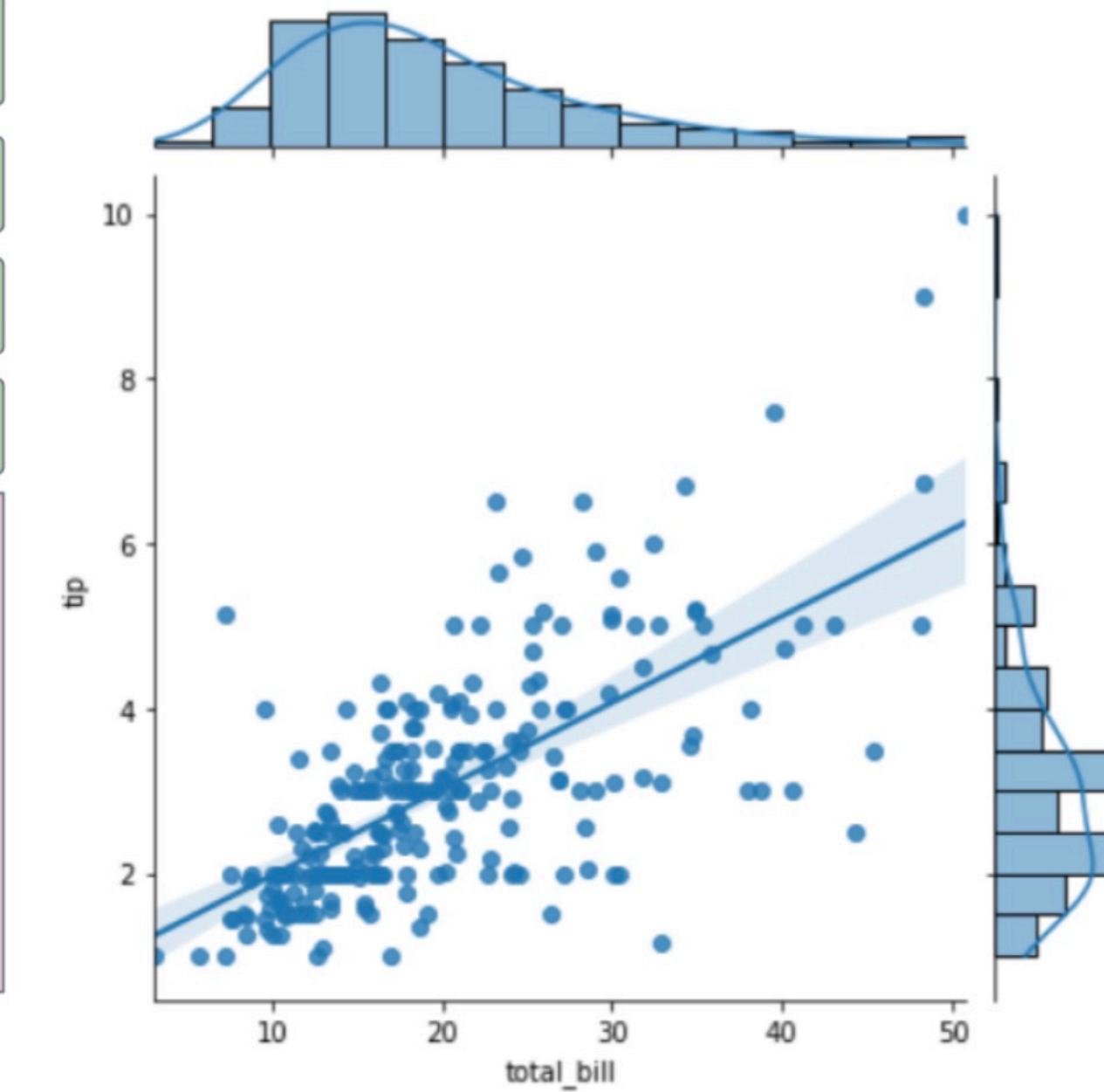
scatter

reg

kde

hex

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.jointplot(x='total_bill',  
y="tip", kind="scatter",  
data=tips,)
```



► Comparison Plots - jointplot



jointplot

kind =

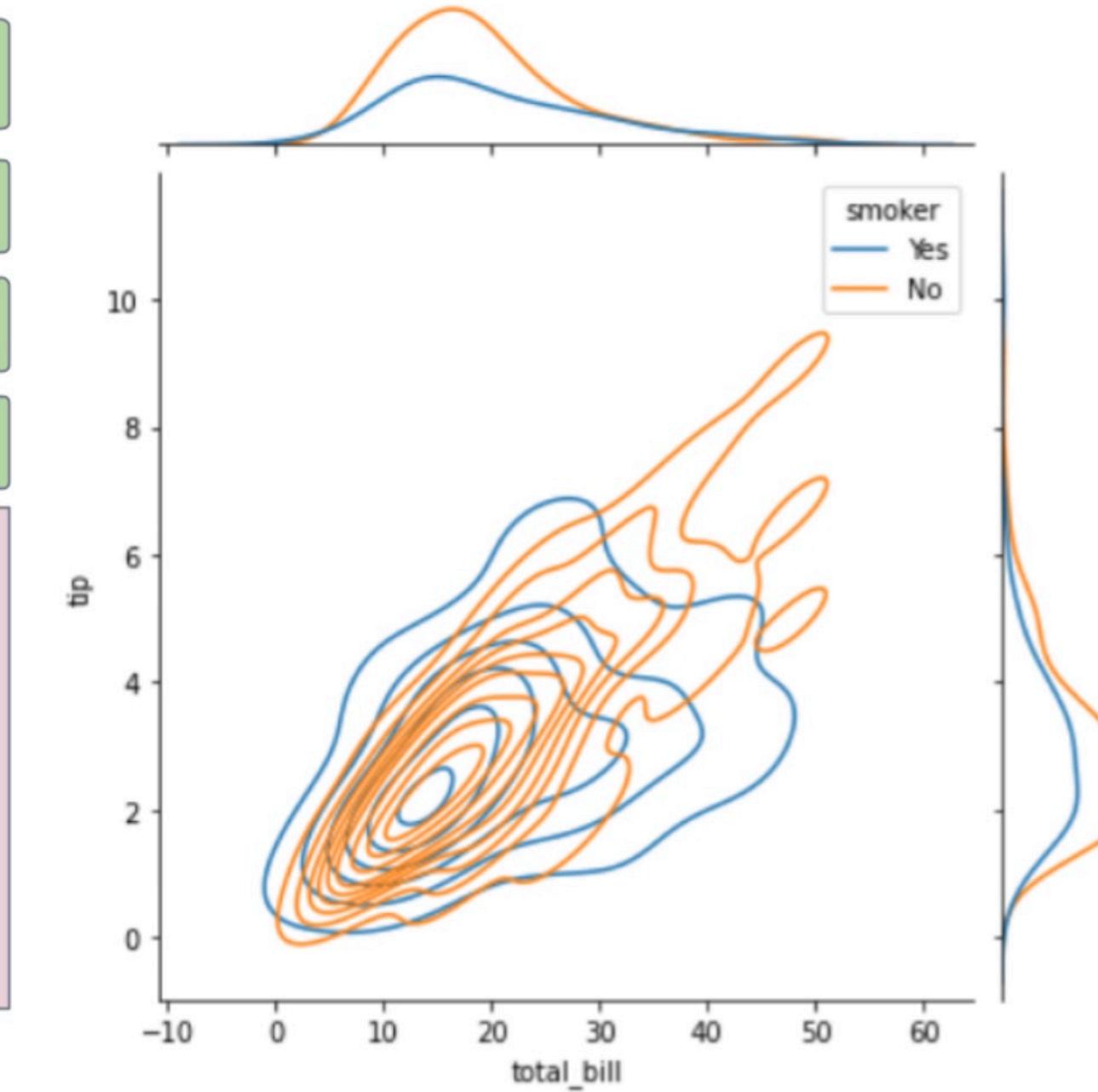
scatter

reg

kde

hex

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.jointplot(x='total_bill',  
y="tip", kind="kde", data=tips,  
hue="smoker")
```



► Comparison Plots - jointplot



jointplot

kind =

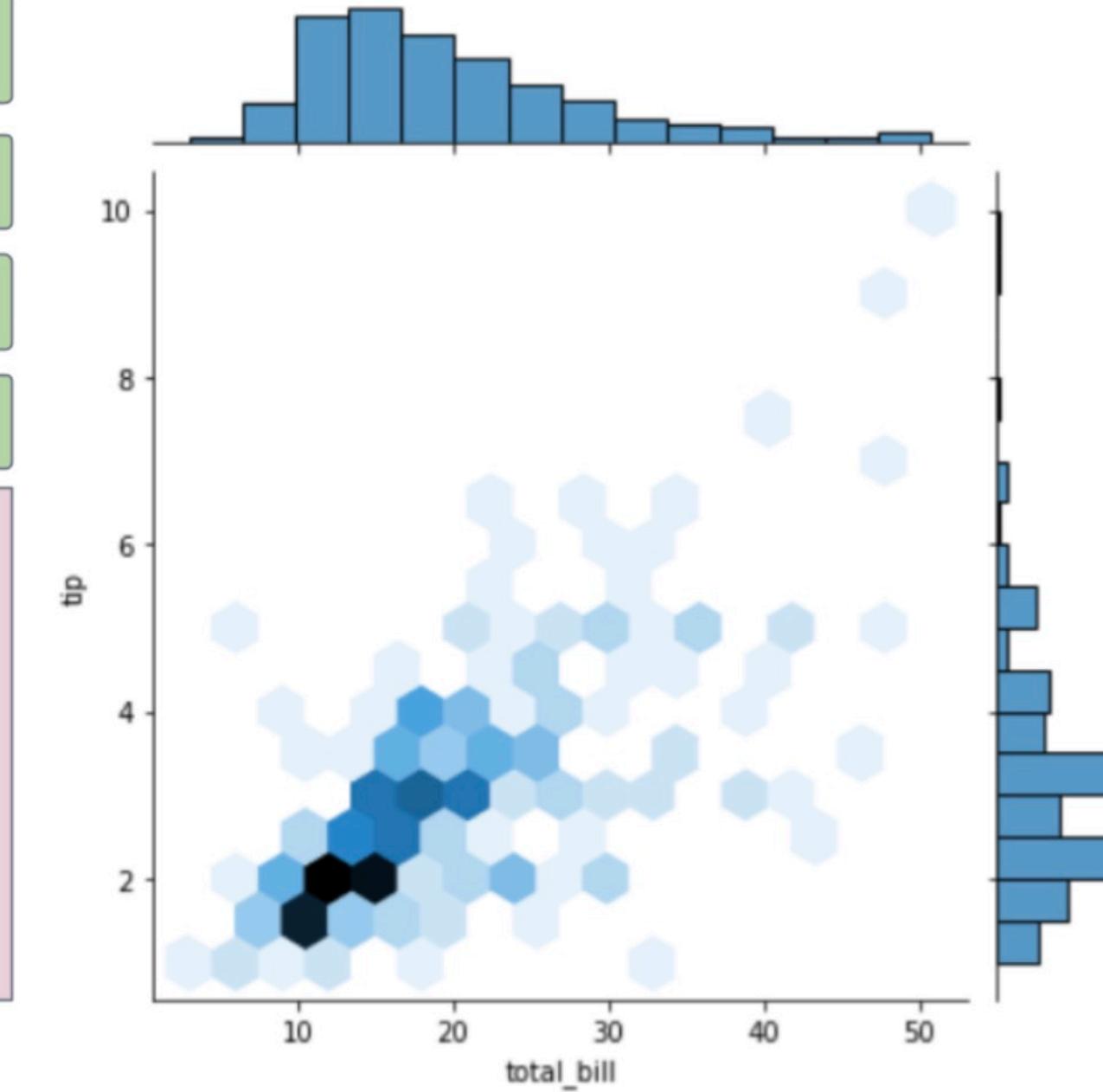
scatter

reg

kde

hex

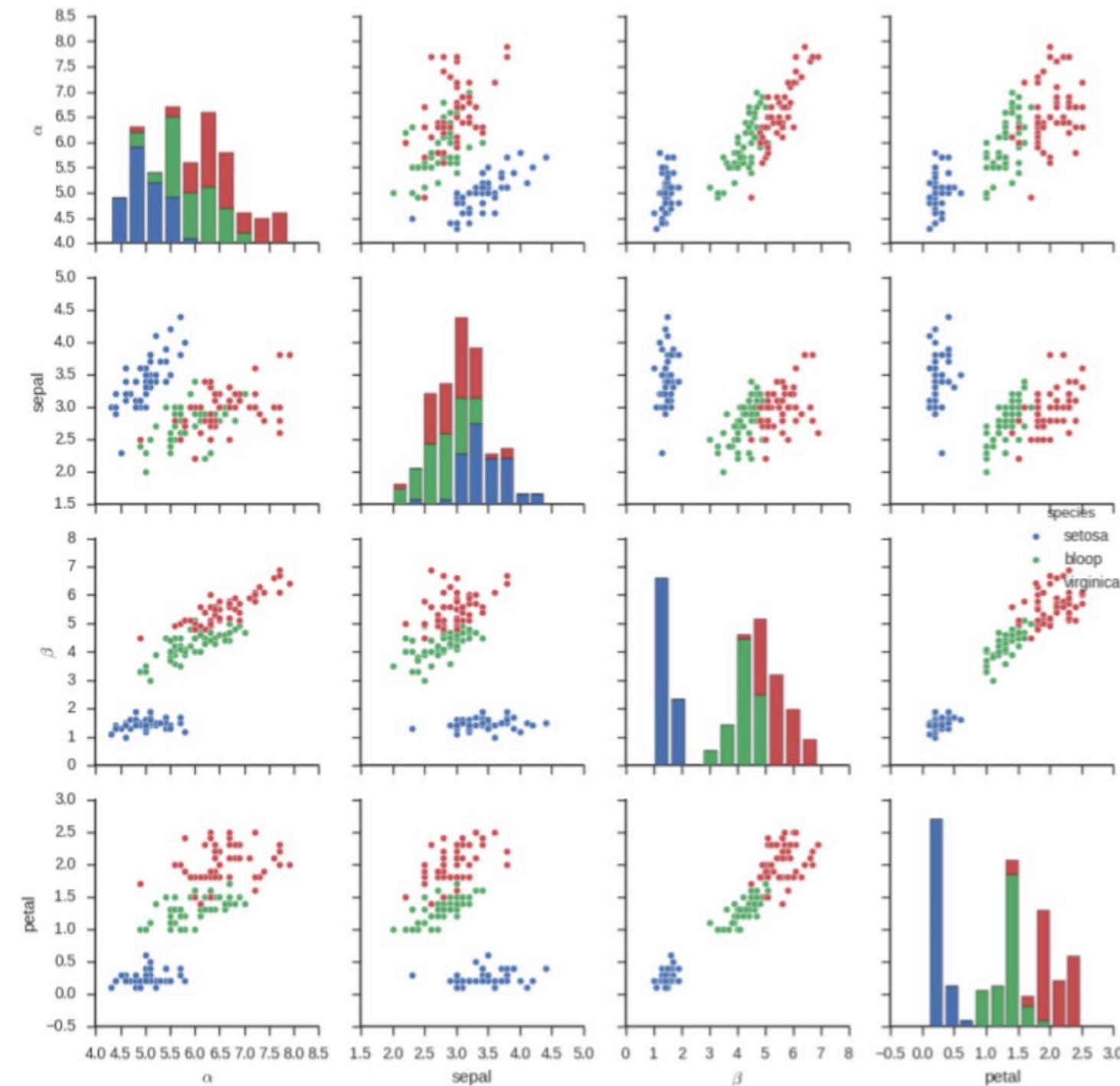
```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.jointplot(x='total_bill',  
y="tip", kind="hex", data=tips)
```



► Comparison Plots



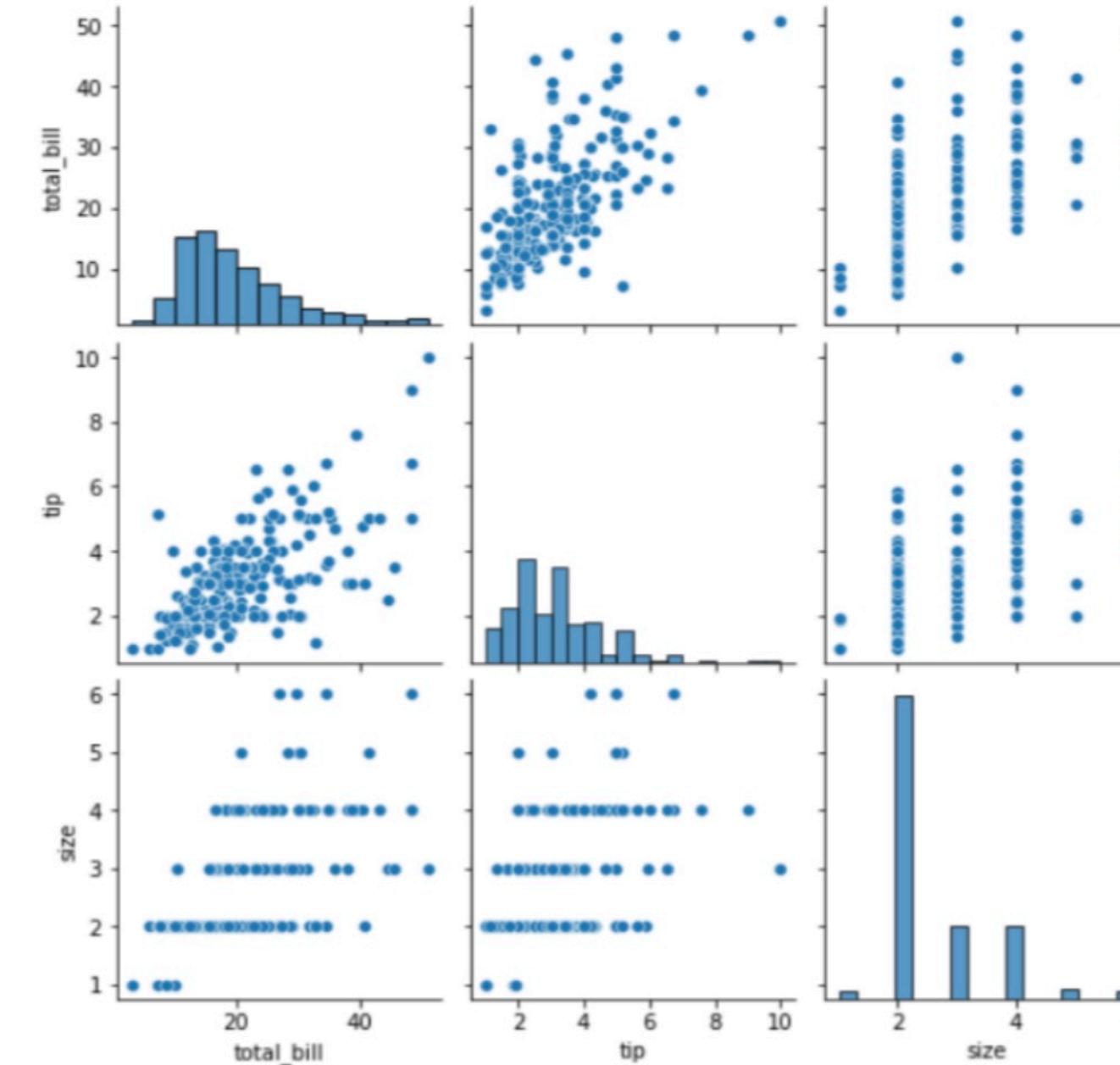
pairplot



► Comparison Plots - pairplot



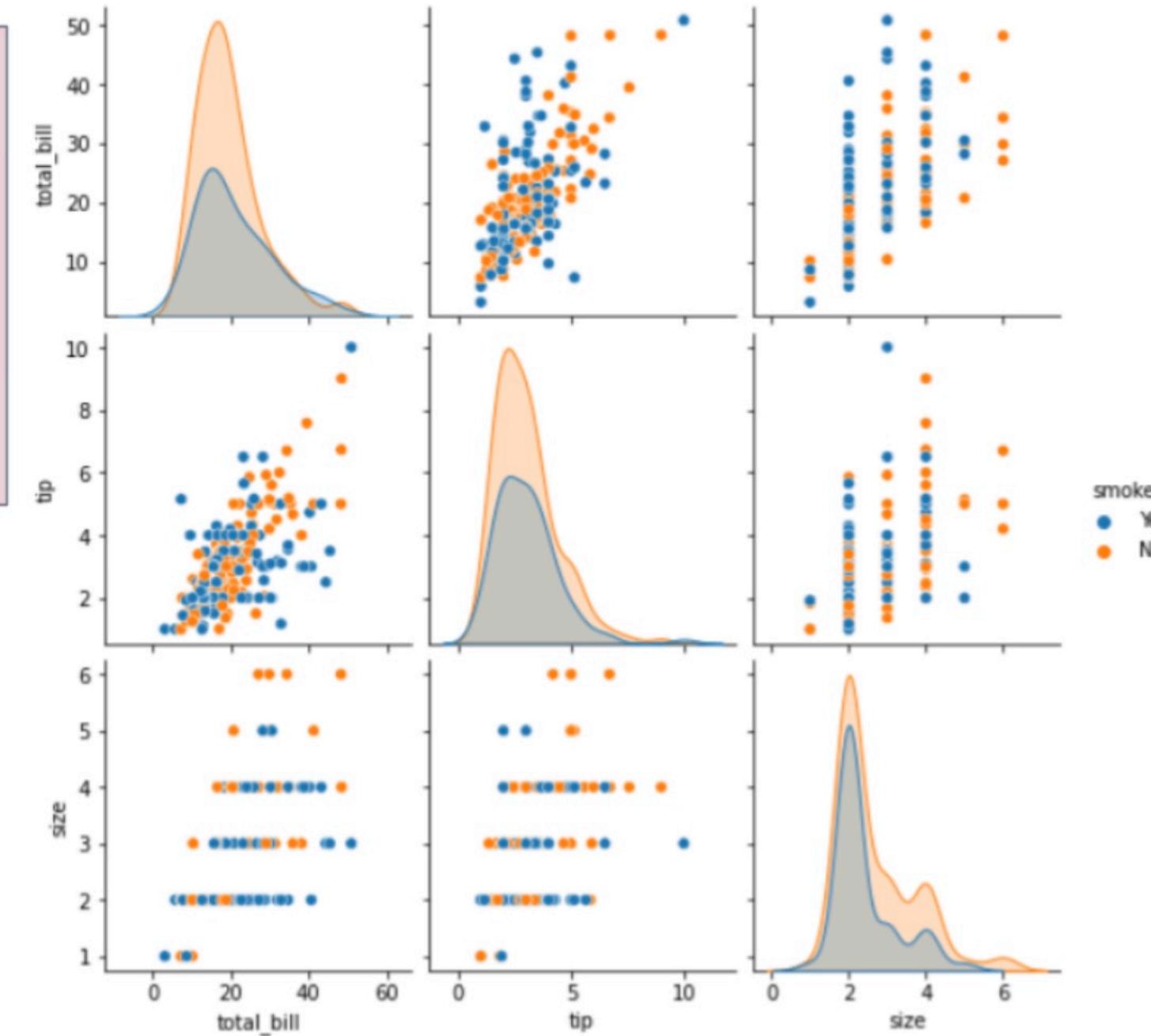
```
import seaborn as sns  
  
tips =  
sns.load_dataset("tips")  
  
sns.pairplot(data=tips)
```



► Comparison Plots - pairplot



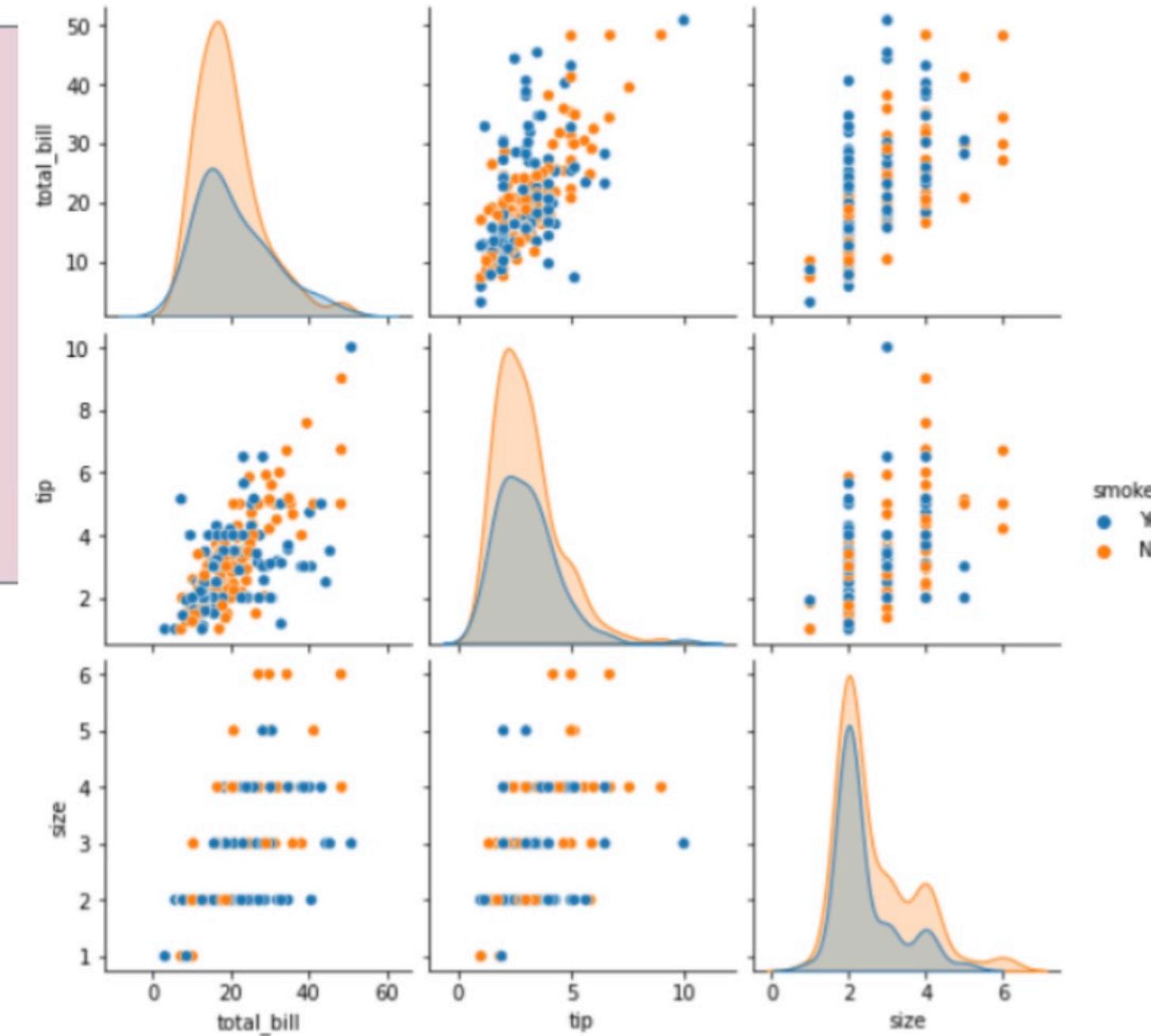
```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.pairplot(tips,hue="smoker")
```

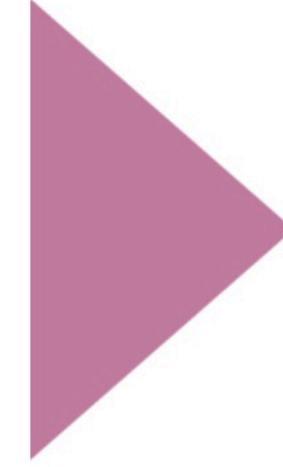


► Comparison Plots - pairplot



```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
sns.pairplot(tips,hue="smoker")  
  
# corner=True
```





Matrix and Grid Plots

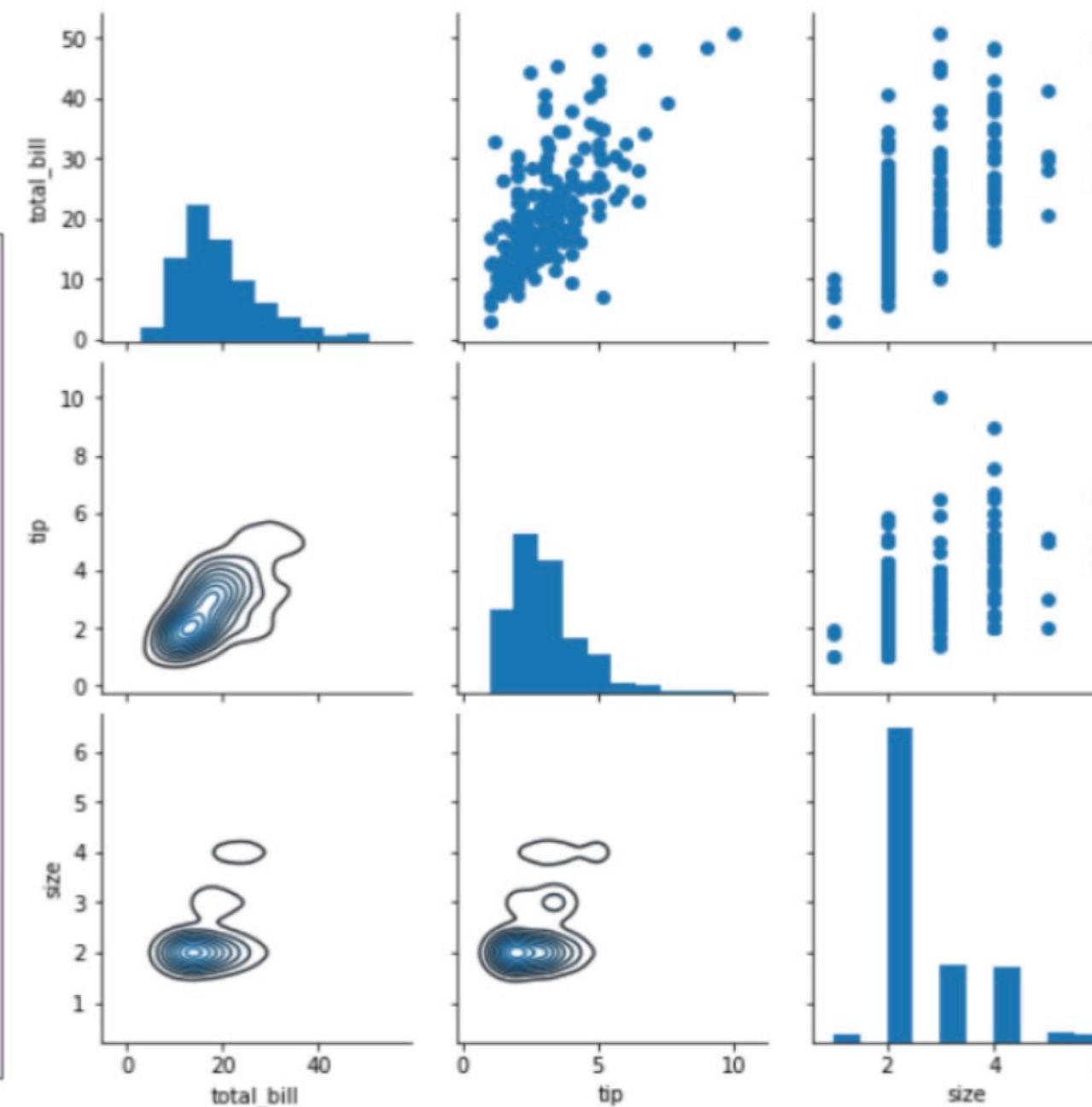


► Grids



PairGrid

```
import seaborn as sns  
  
tips = sns.load_dataset("tips")  
  
g = sns.PairGrid(tips)  
# g = g.map(sns.scatterplot)  
  
g = g.map_upper(sns.scatterplot)  
g = g.map_diag(sns.histplot)  
g = g.map_lower(sns.kdeplot)
```

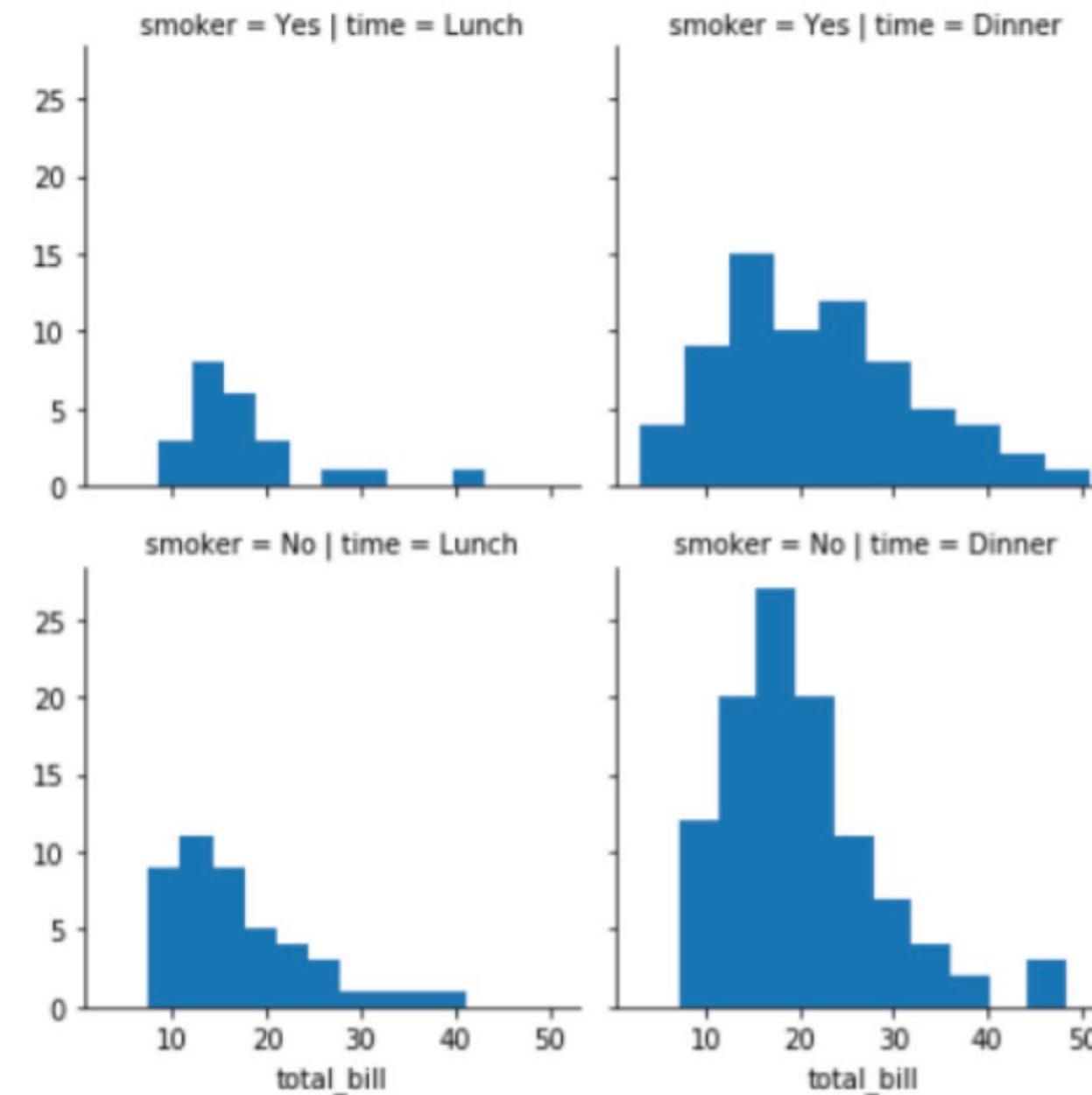


► Grids



FacetGrid

```
import seaborn as sns  
  
tips =  
sns.load_dataset("tips")  
  
g=sns.FacetGrid( data = tips,  
col="time", row="smoker")  
  
g=g.map(plt.hist,"total_bill")
```

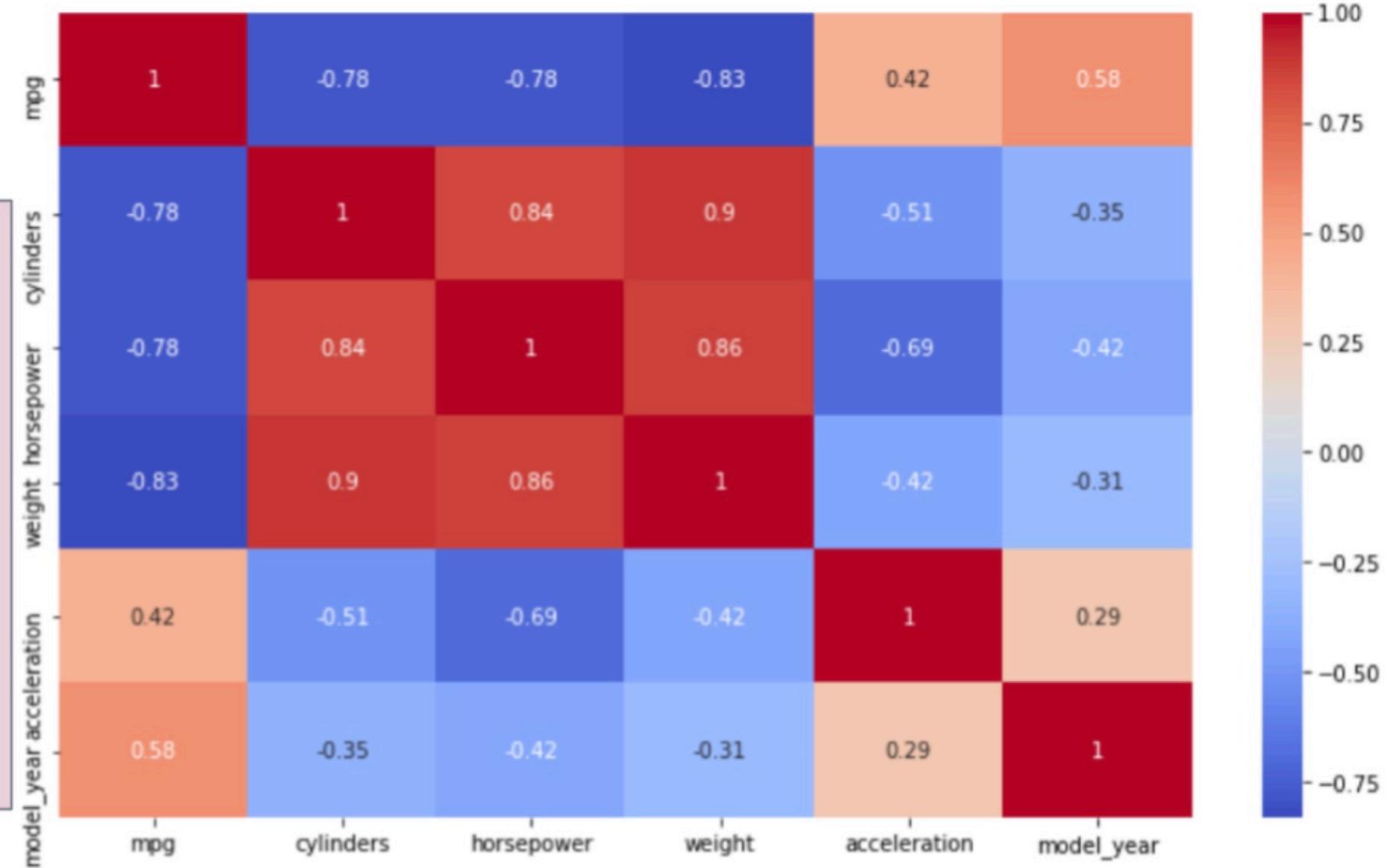


► Matrix Plots



heatmap

```
import seaborn as sns  
  
sns.heatmap( df.corr() )
```



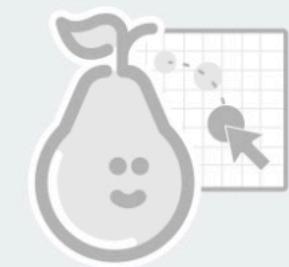
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Do not remove this bar



Students, drag the icon!



No Draggable™ Response
You didn't answer this question