

In [1]:

```
import matplotlib.pyplot as plt
import seaborn as sns

plt.rcParams["figure.figsize"] = [10,8]

tips_data=sns.load_dataset('tips')

tips_data.head()
```

Out[1]:

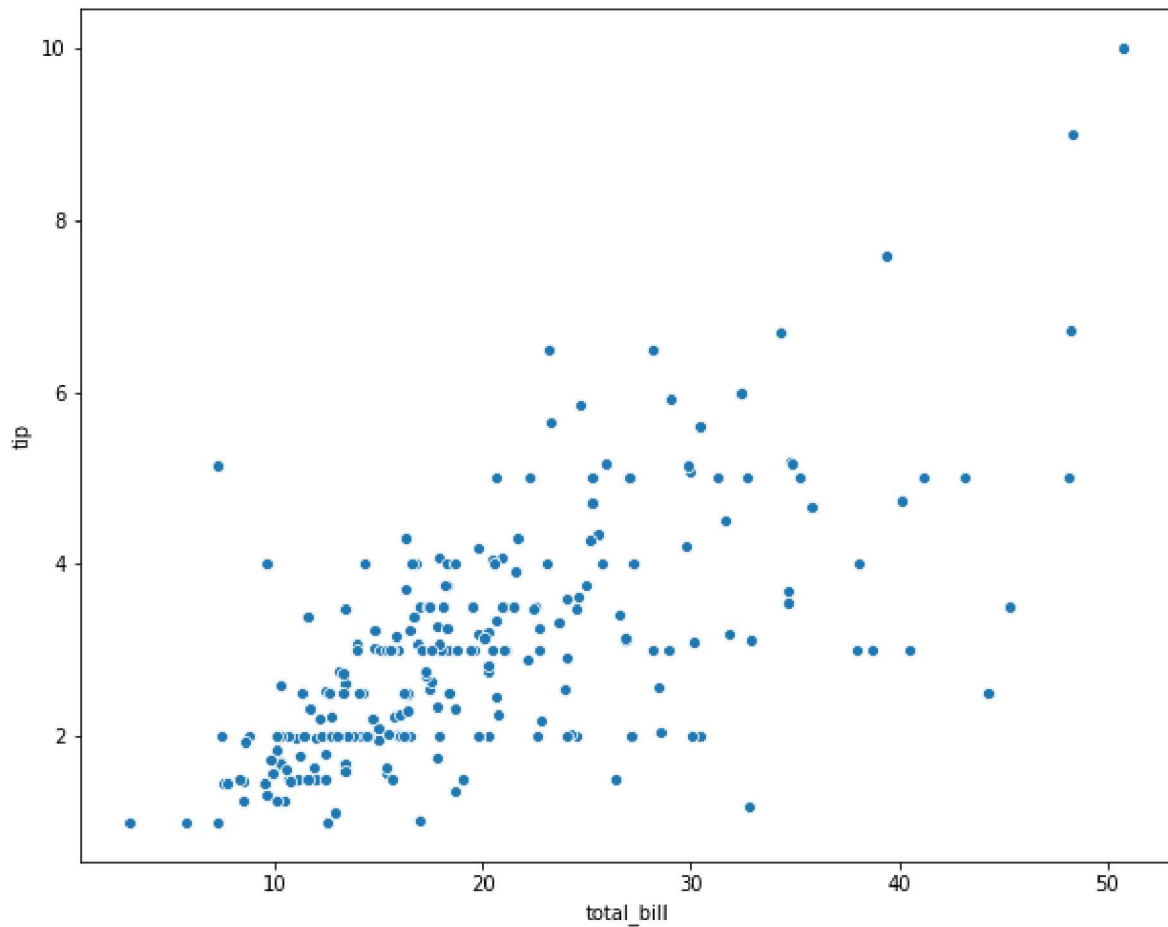
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

In [2]:

```
sns.scatterplot(x="total_bill", y="tip", data=tips_data)
```

Out[2]:

<matplotlib.axes.\_subplots.AxesSubplot at 0x27fc3c4ba88>

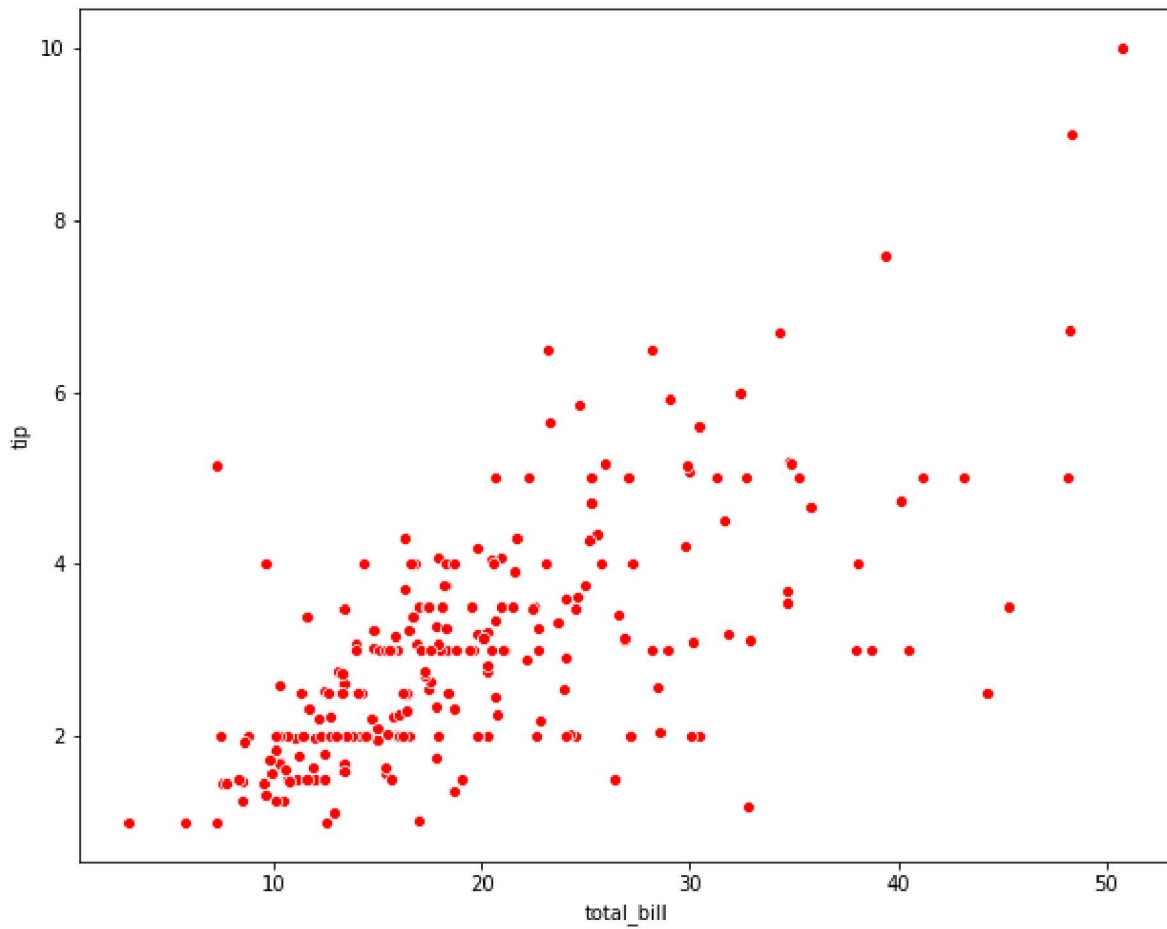


In [3]:

```
sns.scatterplot(x="total_bill", y="tip", data=tips_data, color = 'r')
```

Out[3]:

<matplotlib.axes.\_subplots.AxesSubplot at 0x27fc5d286c8>

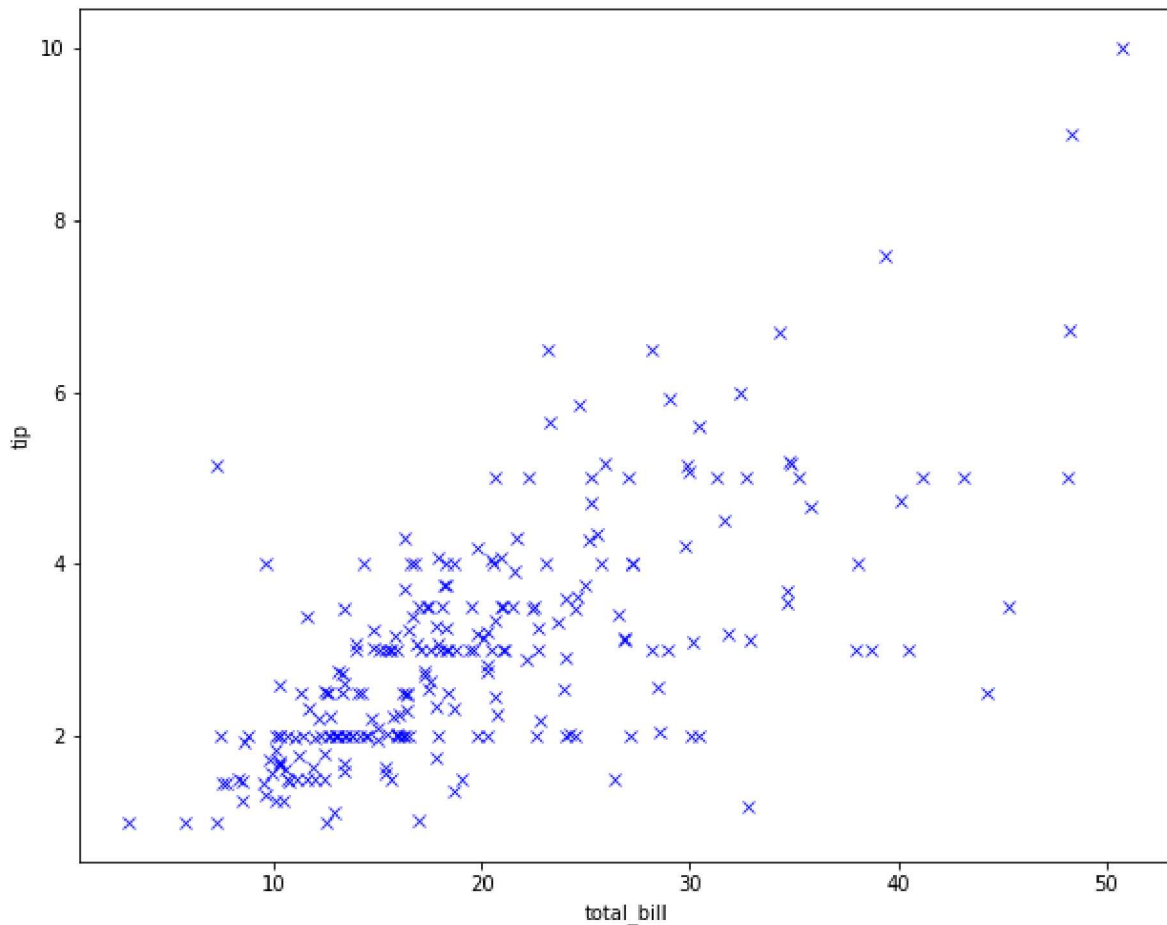


In [4]:

```
sns.scatterplot(x="total_bill", y="tip", data=tips_data, color = 'b', marker = 'x')
```

Out[4]:

<matplotlib.axes.\_subplots.AxesSubplot at 0x27fc5d75f88>



In [5]:

```
import matplotlib.pyplot as plt
import seaborn as sns

plt.rcParams["figure.figsize"] = [8,6]
sns.set_style("darkgrid")

titanic_data =sns.load_dataset('titanic')

titanic_data.head()
```

Out[5]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True

In [6]:

titanic\_data.corr

Out[6]:

```
<bound method DataFrame.corr of
parch      fare embarked  class \
0           0           3   male  22.0      1      0   7.2500      S   Third
1           1           1  female  38.0      1      0  71.2833      C   First
2           1           3  female  26.0      0      0   7.9250      S   Third
3           1           1  female  35.0      1      0  53.1000      S   First
4           0           3   male  35.0      0      0   8.0500      S   Third
..         ...         ...   ...   ...      ...      ...   ...      ...   ...
886          0           2   male  27.0      0      0  13.0000      S  Second
887          1           1  female  19.0      0      0  30.0000      S   First
888          0           3  female   NaN      1      2  23.4500      S   Third
889          1           1   male  26.0      0      0  30.0000      C   First
890          0           3   male  32.0      0      0   7.7500      Q   Third

      who  adult_male  deck  embark_town  alive  alone
0      man          True  NaN  Southampton    no  False
1  woman          False   C   Cherbourg   yes  False
2  woman          False  NaN  Southampton   yes   True
3  woman          False   C   Southampton   yes  False
4    man          True  NaN  Southampton    no   True
..     ...         ...   ...         ...   ...   ...
886   man          True  NaN  Southampton    no   True
887 woman          False   B  Southampton   yes   True
888 woman          False  NaN  Southampton    no  False
889   man          True   C   Cherbourg   yes   True
890   man          True  NaN  Queenstown    no   True
```

[891 rows x 15 columns]&gt;



In [7]:

```
plt.rcParams["figure.figsize"] = [10,8]
corr_values = titanic_data.corr()
sns.heatmap(corr_values, annot=True)
```

Out[7]:

<matplotlib.axes.\_subplots.AxesSubplot at 0x27fc60cd3c8>



In [8]:

```
plt.rcParams["figure.figsize"] = [10,8]
corr_values = titanic_data.corr()
ax=sns.heatmap(corr_values, annot=True)
bottom, top = ax.get_ylim()
ax.set_ylim(bottom + 0.5 , top - 0.5)
```

Out[8]:

(8.5, -0.5)



In [9]:

```
plt.rcParams["figure.figsize"] = [10,8]
corr_values = titanic_data.corr()
ax=sns.heatmap(corr_values, annot=True,cmap = 'coolwarm')
bottom, top = ax.get_ylim()
ax.set_ylim(bottom + 0.5 , top - 0.5)
```

Out[9]:

(8.5, -0.5)





In [10]:

```
import matplotlib.pyplot as plt
import seaborn as sns

plt.rcParams["figure.figsize"] = [10,8]

flights_data=sns.load_dataset('flights')

flights_data.head()
```

Out[10]:

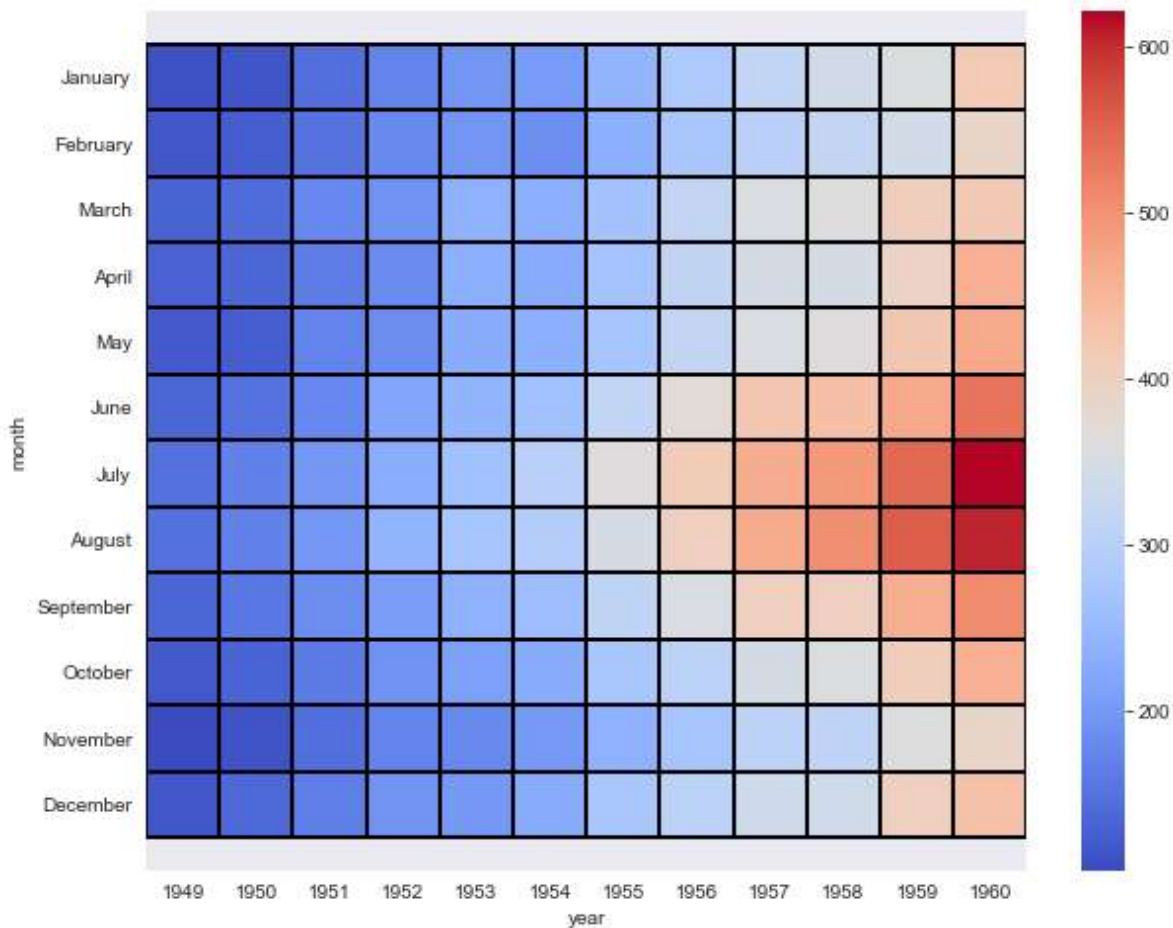
	year	month	passengers
0	1949	January	112
1	1949	February	118
2	1949	March	132
3	1949	April	129
4	1949	May	121

In [11]:

```
flights_data_pivot = flights_data.pivot_table(index='month', columns = 'year', values = 'passenger_count')
ax = sns.heatmap(flights_data_pivot, cmap = 'coolwarm', linecolor='black',linewidth=1)
bottom, top = ax.get_ylim()
ax.set_ylim(bottom + 0.5, top - 0.5)
```

Out[11]:

(12.5, -0.5)



In [12]:

```

flights_data_pivot = flights_data.pivot_table(index='month', columns = 'year', values = 'pass
ax = sns.clustermap(flights_data_pivot, cmap = 'coolwarm', linecolor='black',linewidth=1)
bottom, top = ax.get_ylim()
ax.set_ylim(bottom + 0.5, top - 0.5)

```

**AttributeError**

Traceback (most recent call last)

&lt;ipython-input-12-96bc2cdc7327&gt; in &lt;module&gt;

```

1 flights_data_pivot = flights_data.pivot_table(index='month', columns
= 'year', values = 'passengers')

```

```

2 ax = sns.clustermap(flights_data_pivot, cmap = 'coolwarm', linecolor
= 'black', linewidth=1)

```

```

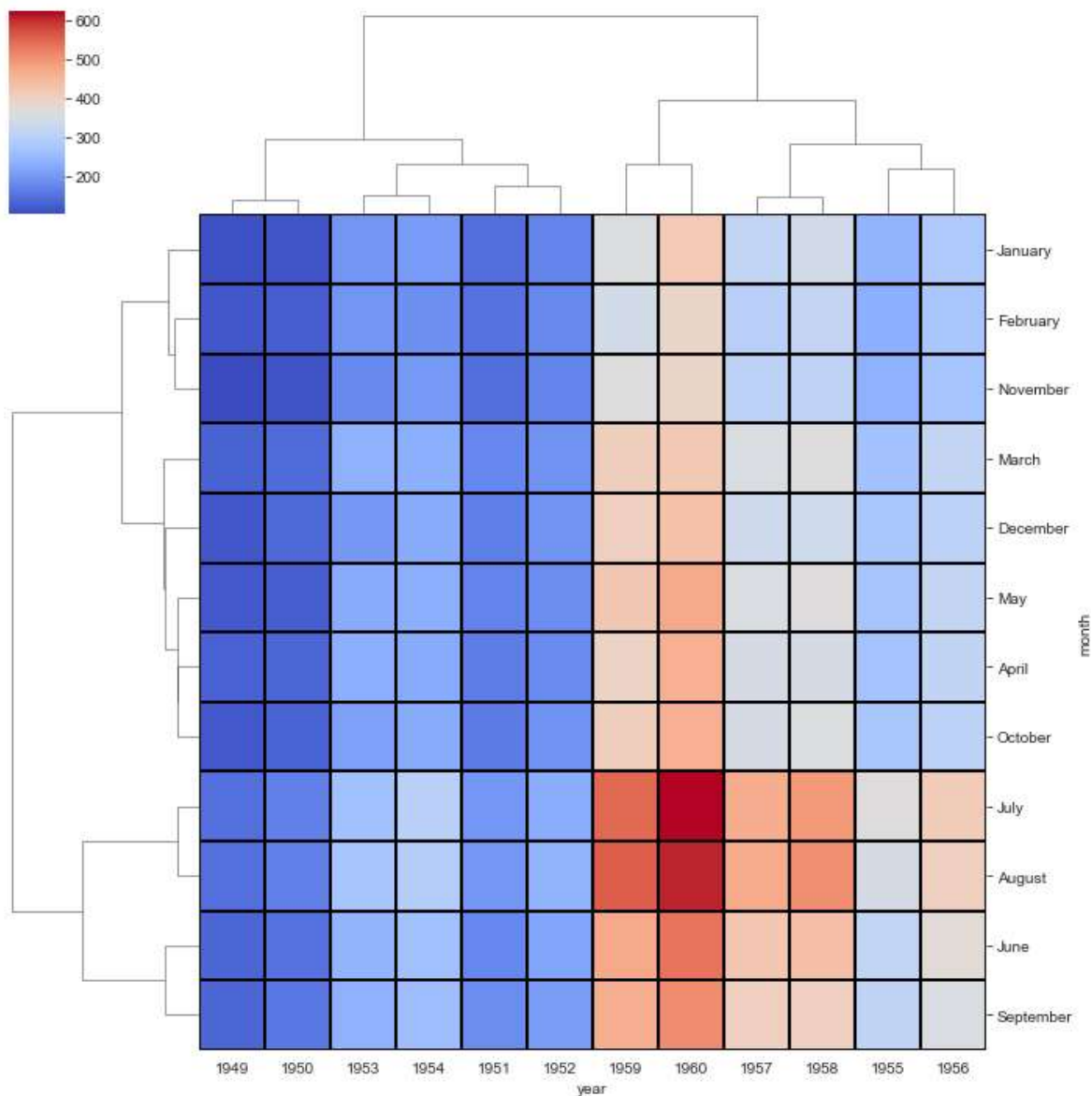
----> 3 bottom, top = ax.get_ylim()

```

```

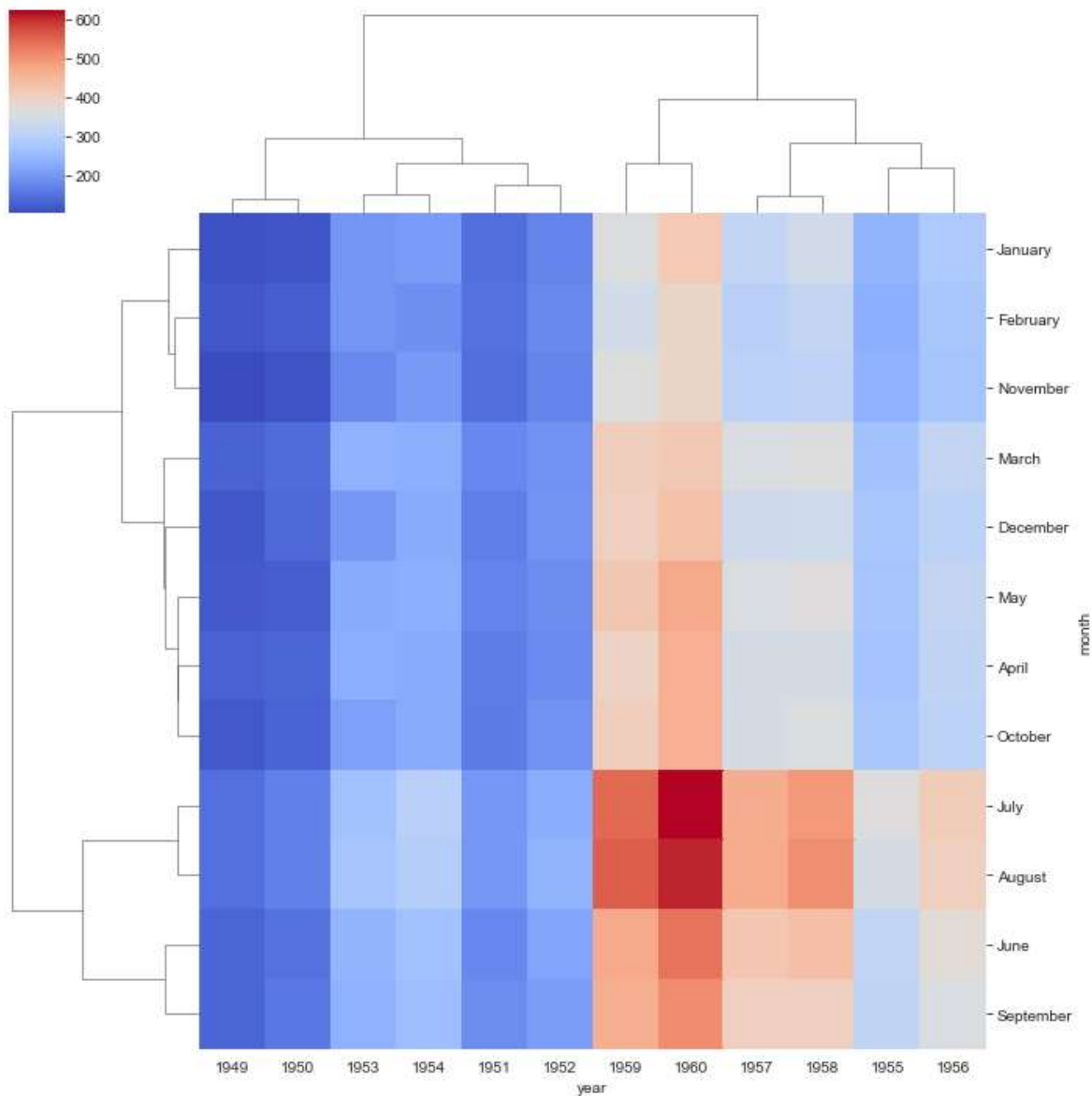
4 ax.set_ylim(bottom + 0.5, top - 0.5)

```

**AttributeError:** 'ClusterGrid' object has no attribute 'get\_ylim'

In [13]:

```
flights_data_pivot = flights_data.pivot_table(index='month', columns = 'year', values = 'passenger_count')
ax = sns.clustermap(flights_data_pivot, cmap = 'coolwarm')
```



In [14]:

```
import matplotlib.pyplot as plt
import seaborn as sns

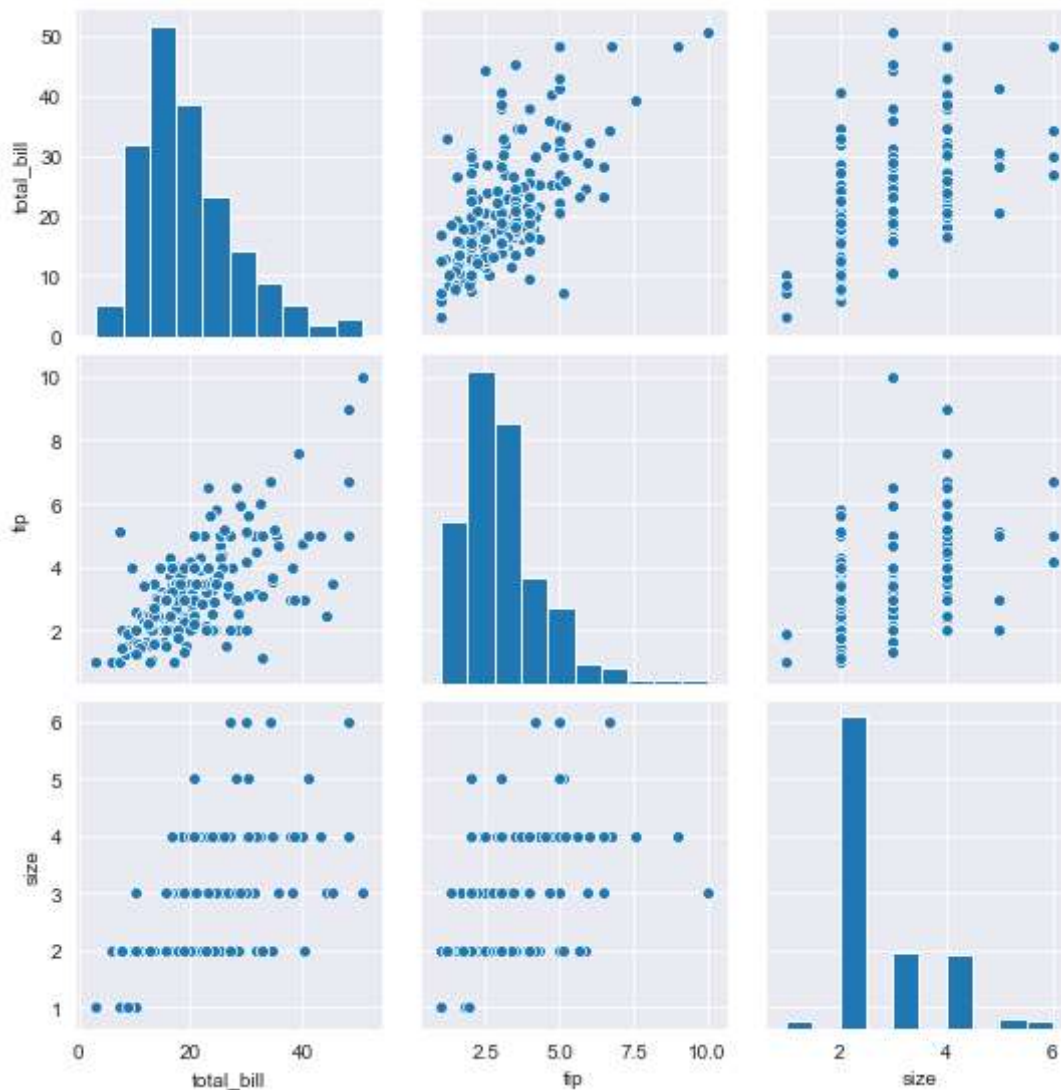
plt.rcParams["figure.figsize"] = [10,8]

tips_data = sns.load_dataset('tips')

sns.pairplot(tips_data)
```

Out[14]:

<seaborn.axisgrid.PairGrid at 0x27fc2c4d108>

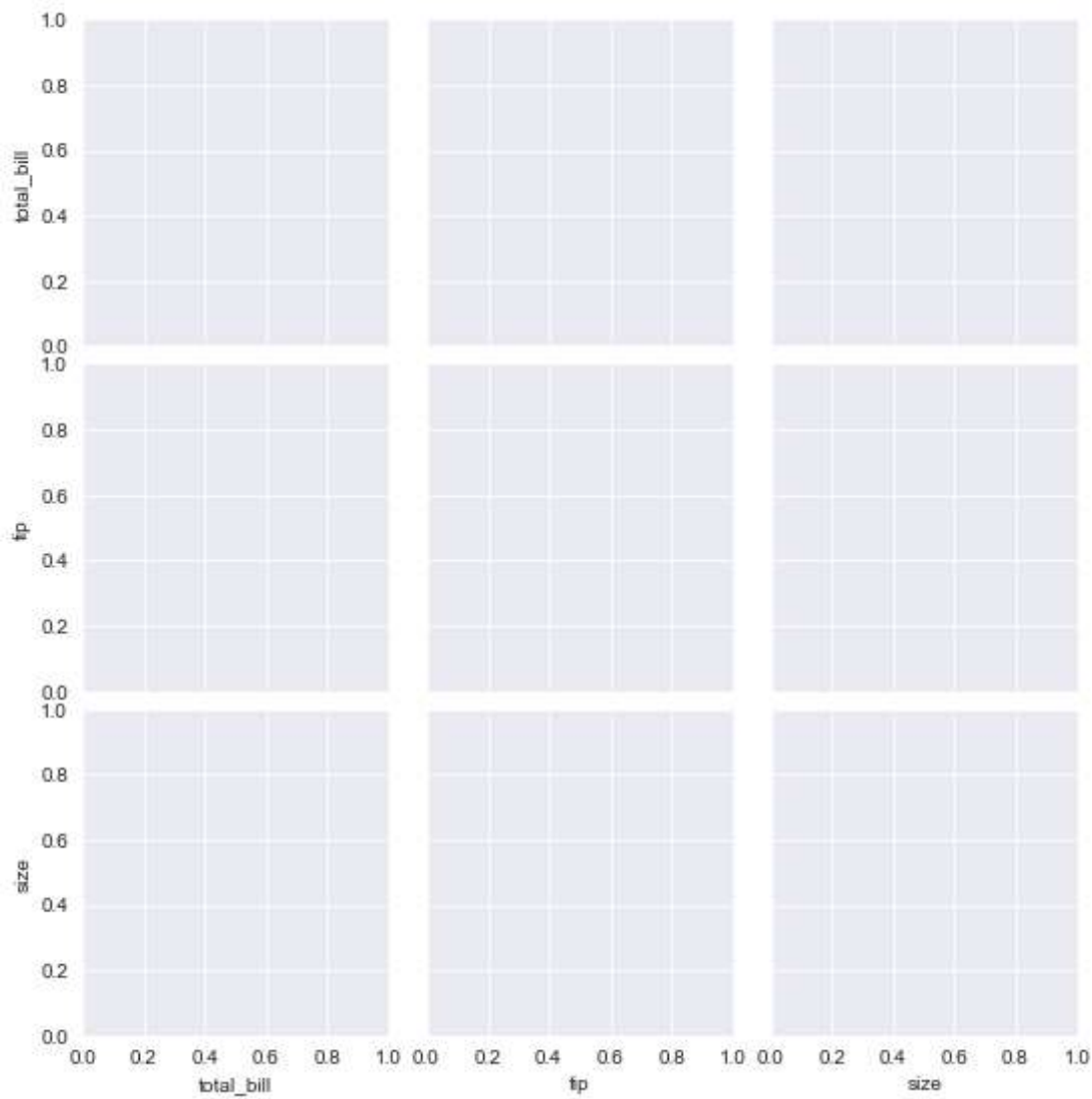


In [15]:

```
sns.PairGrid(tips_data)
```

Out[15]:

<seaborn.axisgrid.PairGrid at 0x27fc6065808>

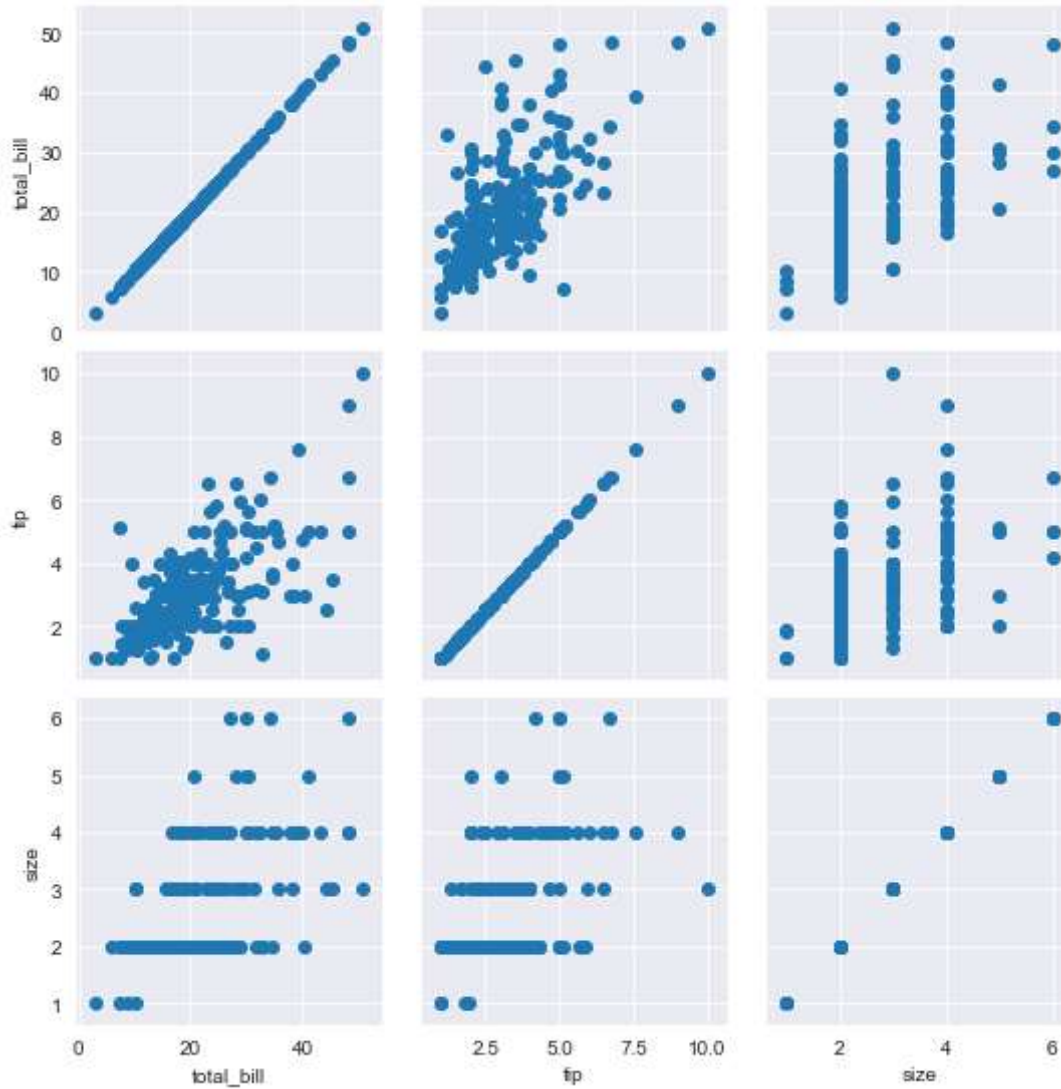


In [16]:

```
pgrids = sns.PairGrid(tips_data)
pgrids.map(plt.scatter)
```

Out[16]:

<seaborn.axisgrid.PairGrid at 0x27fc64e6288>

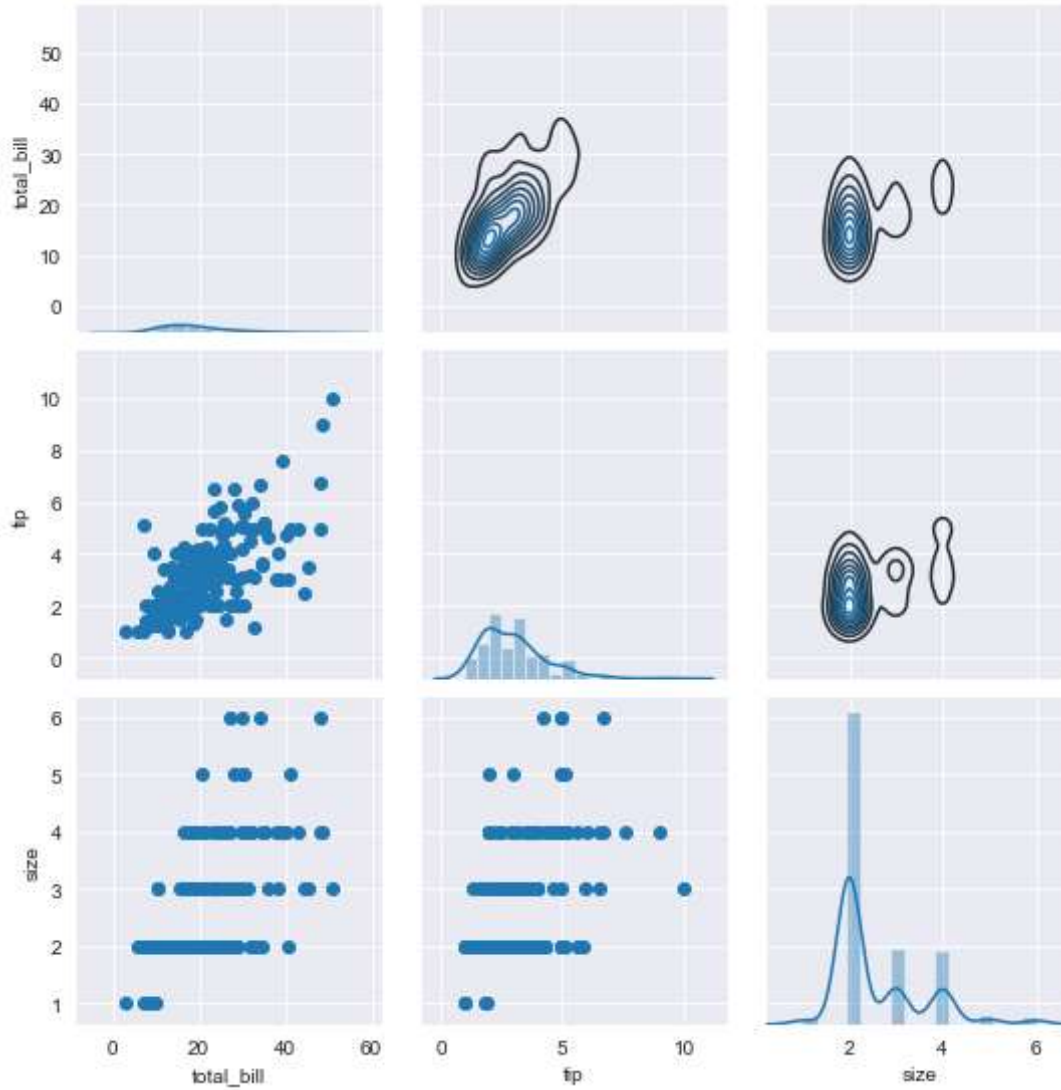


In [17]:

```
pgrids = sns.PairGrid(tips_data)
pgrids.map_diag(sns.distplot)
pgrids.map_upper(sns.kdeplot)
pgrids.map_lower(plt.scatter)
```

Out[17]:

<seaborn.axisgrid.PairGrid at 0x27fc6dae888>





In [18]:

```
import matplotlib.pyplot as plt
import seaborn as sns

plt.rcParams["figure.figsize"] = [10,8]

tips_data=sns.load_dataset('tips')

tips_data.head()
```

Out[18]:

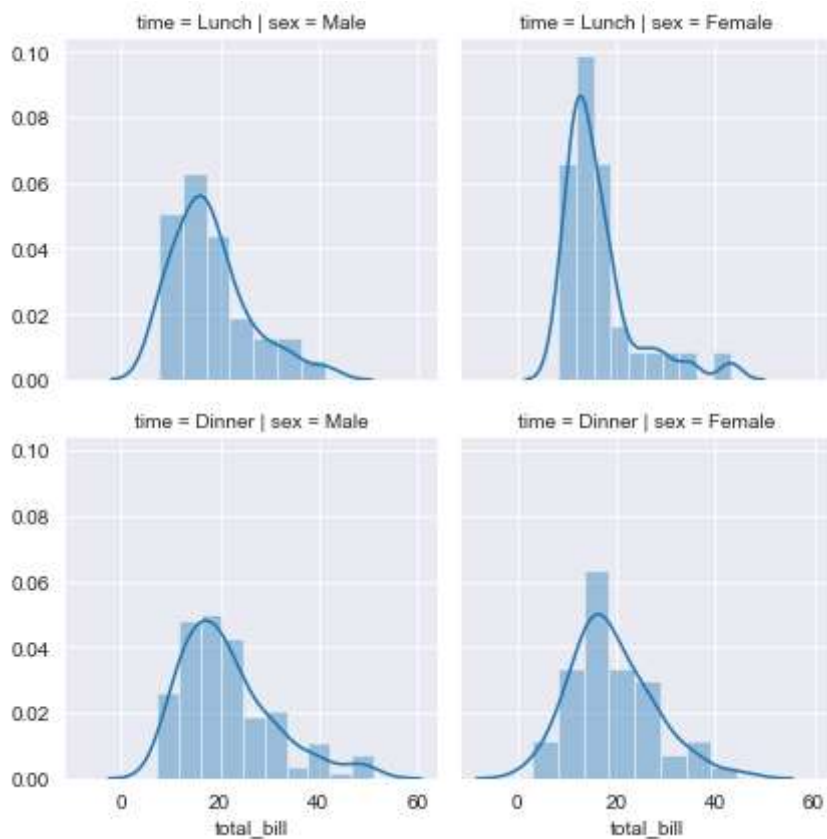
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

In [19]:

```
fgrid = sns.FacetGrid(data=tips_data,col='sex', row='time')
fgrid.map(sns.distplot, 'total_bill')
```

Out[19]:

<seaborn.axisgrid.FacetGrid at 0x27fc7e4c4c8>

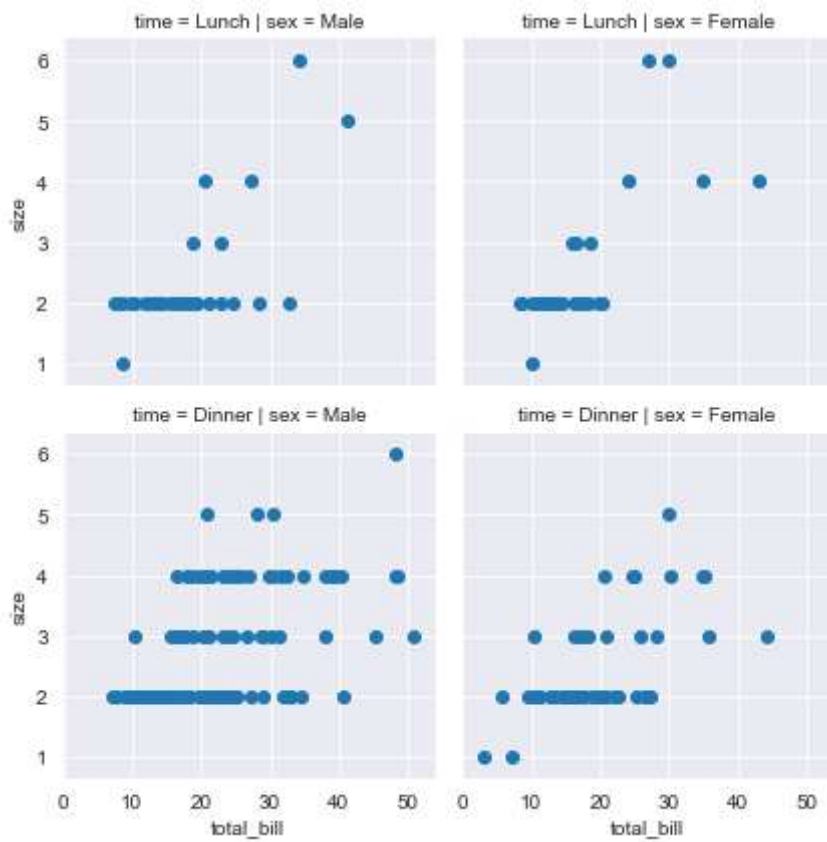


In [20]:

```
fgrid = sns.FacetGrid(data=tips_data,col='sex', row='time')  
fgrid.map(plt.scatter, 'total_bill', 'size')
```

Out[20]:

<seaborn.axisgrid.FacetGrid at 0x27fc8377708>

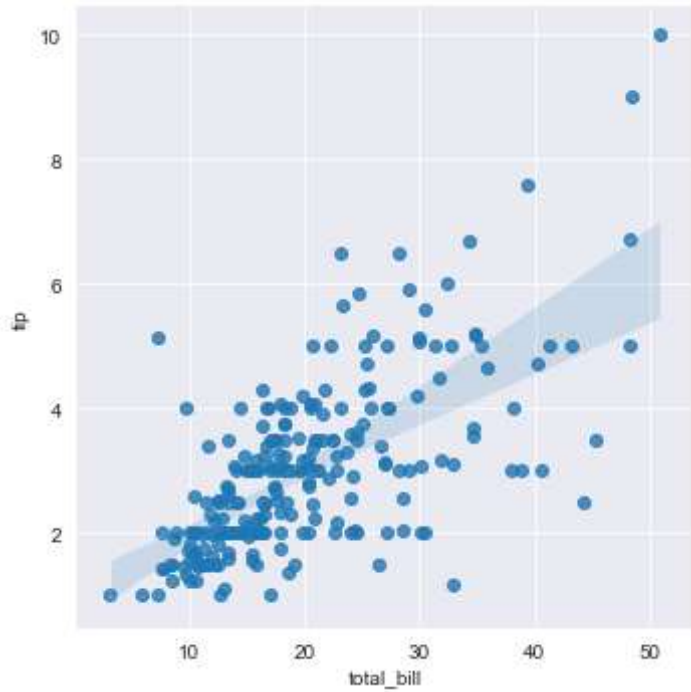


In [21]:

```
sns.lmplot(x='total_bill',y='tip',data=tips_data)
```

Out[21]:

<seaborn.axisgrid.FacetGrid at 0x27fc9489d48>

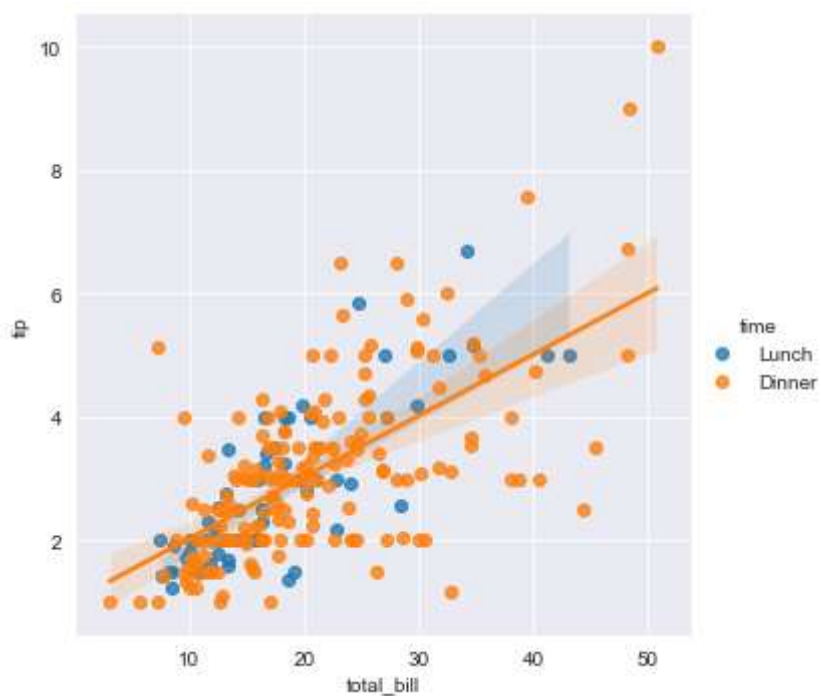


In [22]:

```
sns.lmplot(x='total_bill',y='tip',data=tips_data, hue='time')
```

Out[22]:

<seaborn.axisgrid.FacetGrid at 0x27fc9517748>

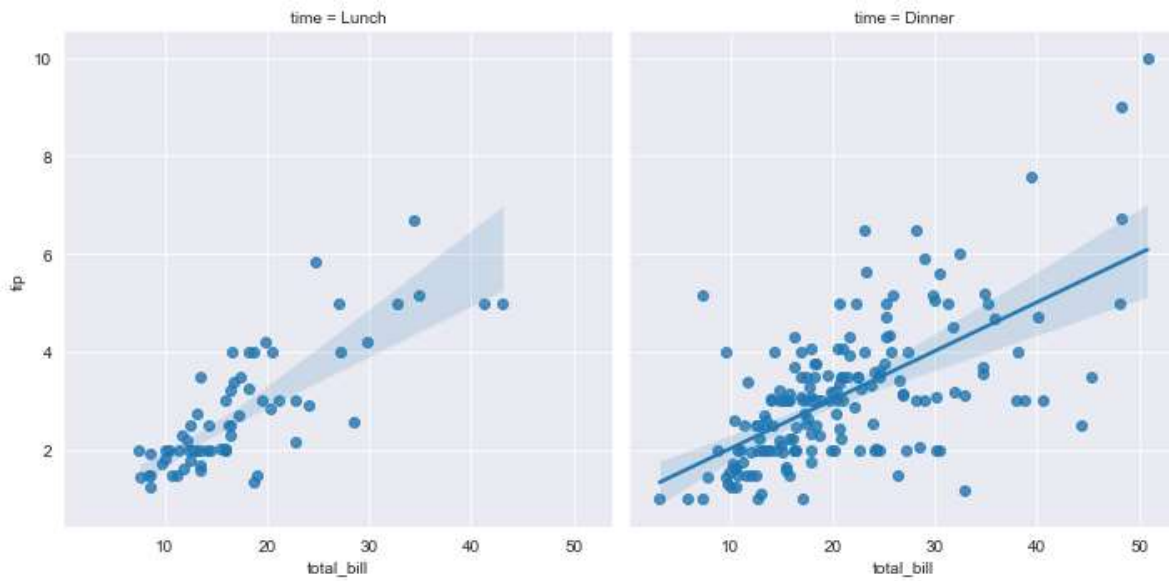


In [23]:

```
sns.lmplot(x='total_bill',y='tip',data=tips_data,col='time')
```

Out[23]:

<seaborn.axisgrid.FacetGrid at 0x27fc9564688>



In [ ]: