Seaborn libary for visualization

In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
import warnings
warnings.filterwarnings('ignore')
```

In [2]:
```
# loads dummy dataset from seaborn libary
df = sns.load_dataset('tips')
df.head()
```

Out[2]:

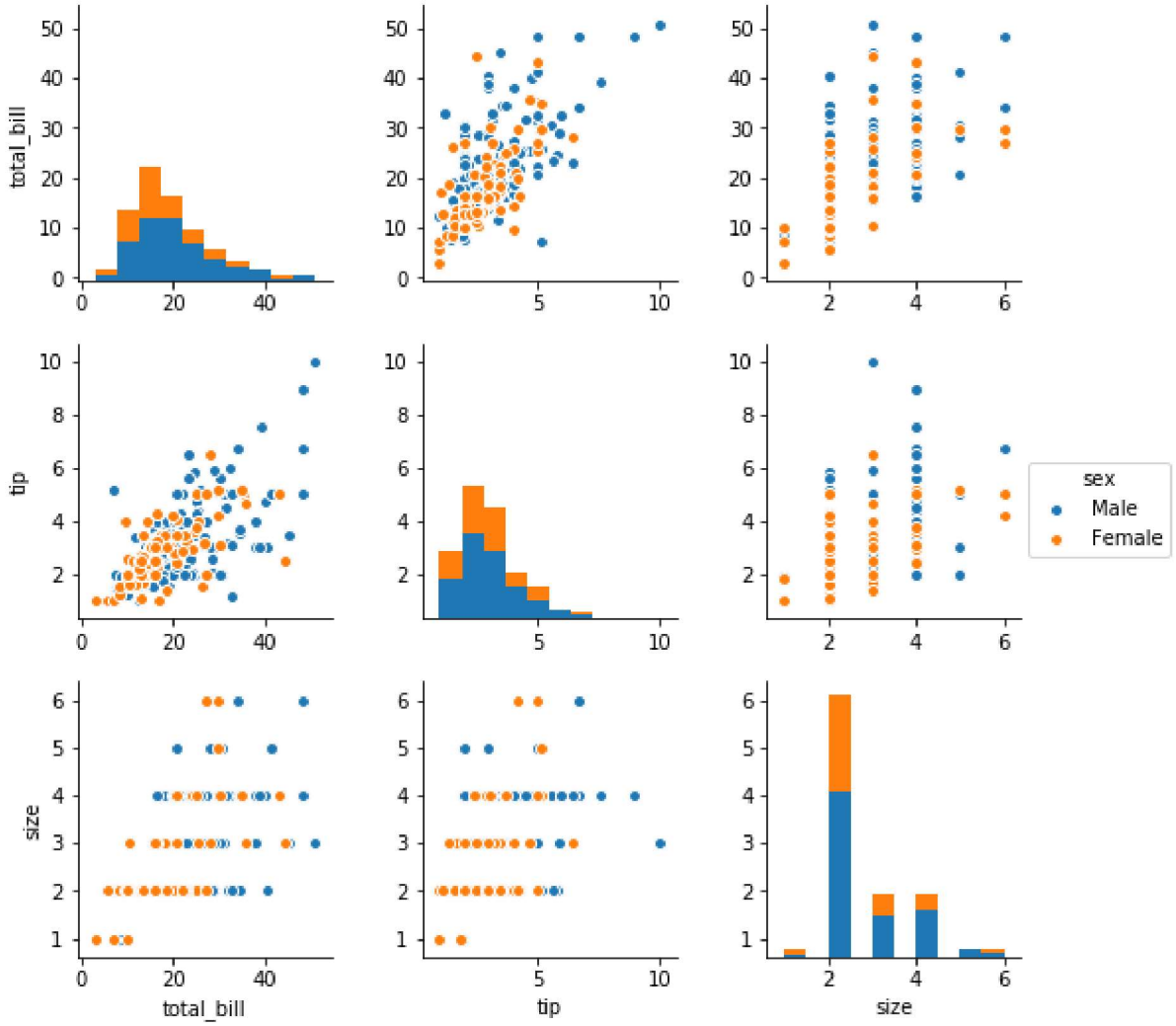
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

In [3]:
```
df.info()
```

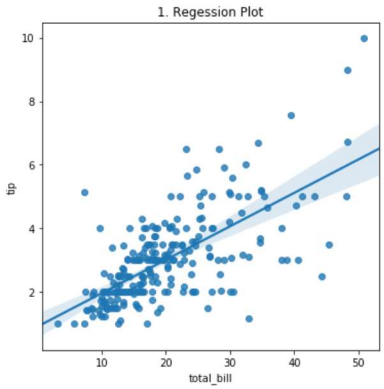
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 244 entries, 0 to 243
Data columns (total 7 columns):
total_bill    244 non-null float64
tip           244 non-null float64
sex           244 non-null category
smoker        244 non-null category
day           244 non-null category
time          244 non-null category
size          244 non-null int64
dtypes: category(4), float64(2), int64(1)
memory usage: 7.2 KB
```

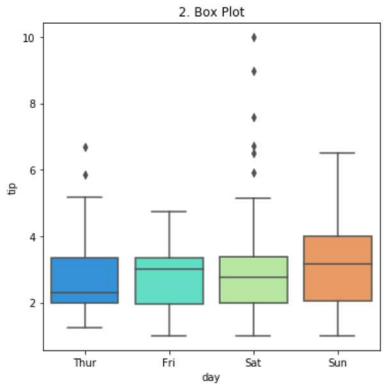
In [4]:
```
# pairplot
sns.pairplot(df,hue='sex')
```

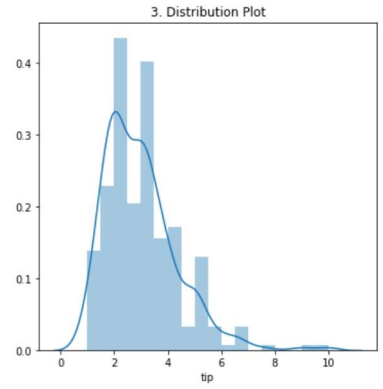
Out[4]: <seaborn.axisgrid.PairGrid at 0x20853a22898>

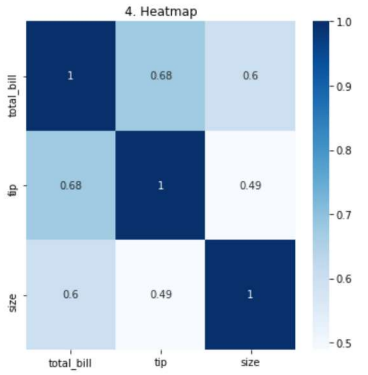


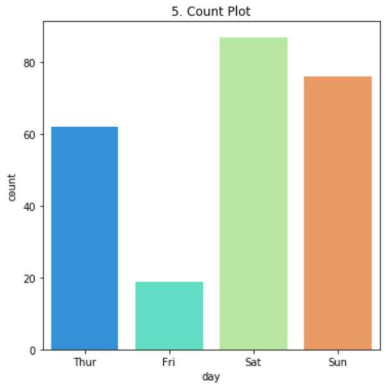
In [5]:
```
# Collection of various charts available in seaborn

fig, axes = plt.subplots(nrows=3, ncols=3,figsize=(20,20))

sns.regplot(x='total_bill',y='tip',data=df, ax=axes[0][0])
axes[0][0].set_title('1. Regession Plot')

sns.boxplot(x='day',y='tip',data=df, ax=axes[0][1],palette='rainbow')
axes[0][1].set_title('2. Box Plot')

sns.distplot(df['tip'],ax=axes[0][2])
axes[0][2].set_title('3. Distribution Plot')

sns.heatmap(df.corr(),annot=True,cmap='Blues',ax=axes[1][0])
axes[1][0].set_title('4. Heatmap')

sns.countplot(x='day',data=df,ax=axes[1][1], palette='rainbow')
axes[1][1].set_title('5. Count Plot')

sns.stripplot(x='day',y='total_bill',data=df,jitter=True,hue='sex', ax=axes[1]
[2])
axes[1][2].set_title('6. Strip Plot')

sns.violinplot(x='time',y='total_bill',data=df,hue='smoker',split=True,palette
='Set1', ax=axes[2][0])
axes[2][0].set_title('7. Violin Plot')

sns.barplot(x='total_bill',y='day',data=df,ax=axes[2][1])
axes[2][1].set_title('8. Bar Plot')

sns.lvplot(x='total_bill',y='day',data=df,ax=axes[2][2])
axes[2][2].set_title('9. Letter Value Plot');
```

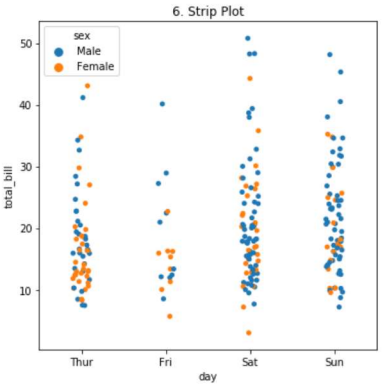

1. Regession Plot
tip
total_bill

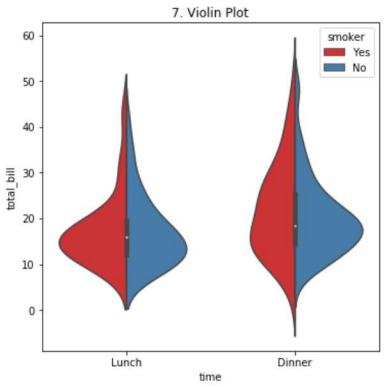

2. Box Plot
tip
Thur
Fri
Sat
Sun
day

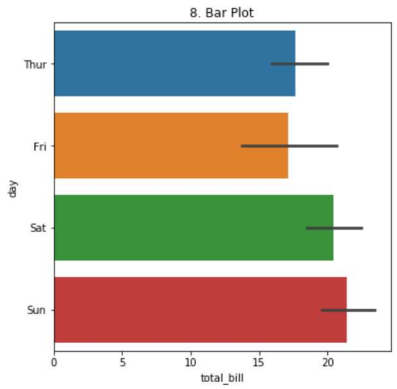

3. Distribution Plot
tip

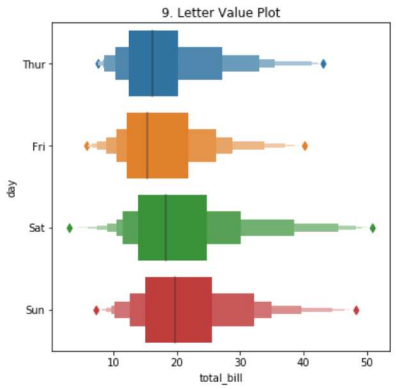

4. Heatmap
total_bill
tip
size
1
0.68
0.6
0.68
1
0.49
0.6
0.49
1


5. Count Plot
count
Thur
Fri
Sat
Sun
day


6. Strip Plot
sex
Male
Female
total_bill
Thur
Fri
Sat
Sun
day


7. Violin Plot
smoker
Yes
No
total_bill
Lunch
Dinner
time


8. Bar Plot
Thur
Fri
Sat
Sun
day
total_bill


9. Letter Value Plot
Thur
Fri
Sat
Sun
day
total_bill