# Titanic

July 30, 2021

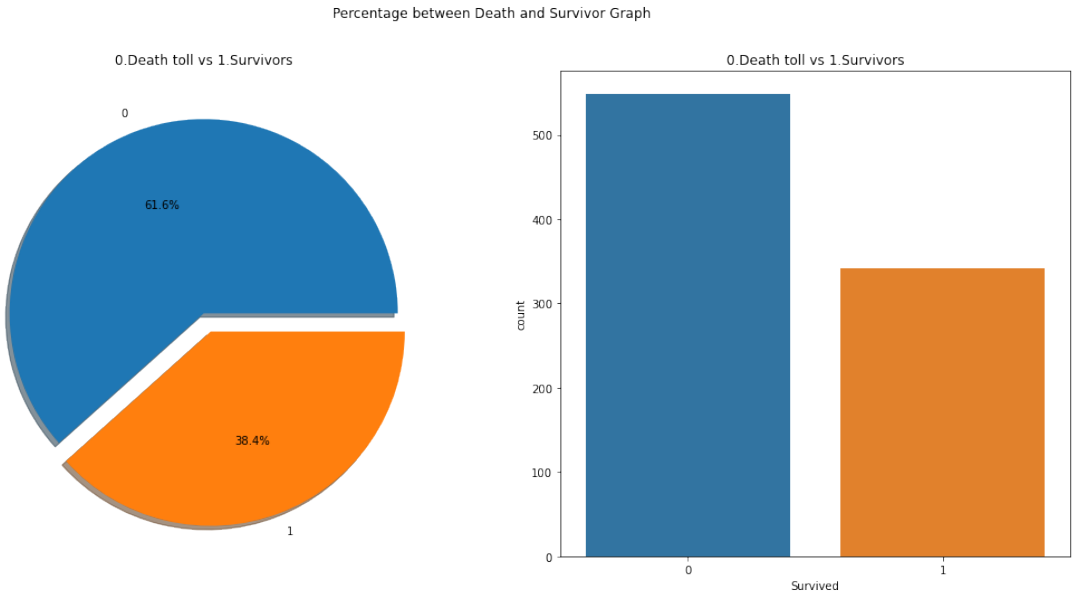
[10]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

[11]:
```
this = pd.read_csv('./data/train.csv')
```

[12]:
```
f, ax = plt.subplots(1, 2, figsize=(18, 8))
series = this['Survived'].value_counts()
series.plot.pie(explode=[0, 0.1], autopct='%1.1f%%', ax=ax[0], shadow=True)
ax[0].set_title('0.Death toll vs 1.Survivors')
ax[0].set_ylabel('')
ax[1].set_title('0.Death toll vs 1.Survivors')
sns.countplot('Survived', data=this, ax=ax[1])
f.suptitle('Percentage between Death and Survivor Graph')
```

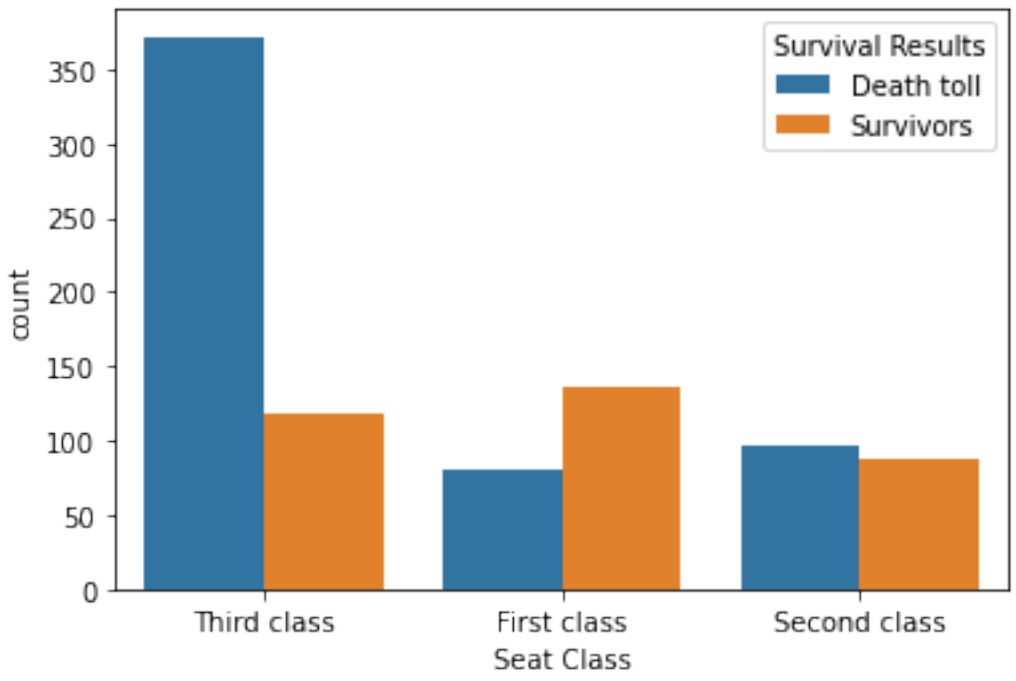
```
/opt/conda/lib/python3.9/site-packages/seaborn/_decorators.py:36: FutureWarning:
Pass the following variable as a keyword arg: x. From version 0.12, the only
valid positional argument will be `data`, and passing other arguments without an
explicit keyword will result in an error or misinterpretation.
  warnings.warn(
```

[12]:
```
Text(0.5, 0.98, 'Percentage between Death and Survivor Graph')
```



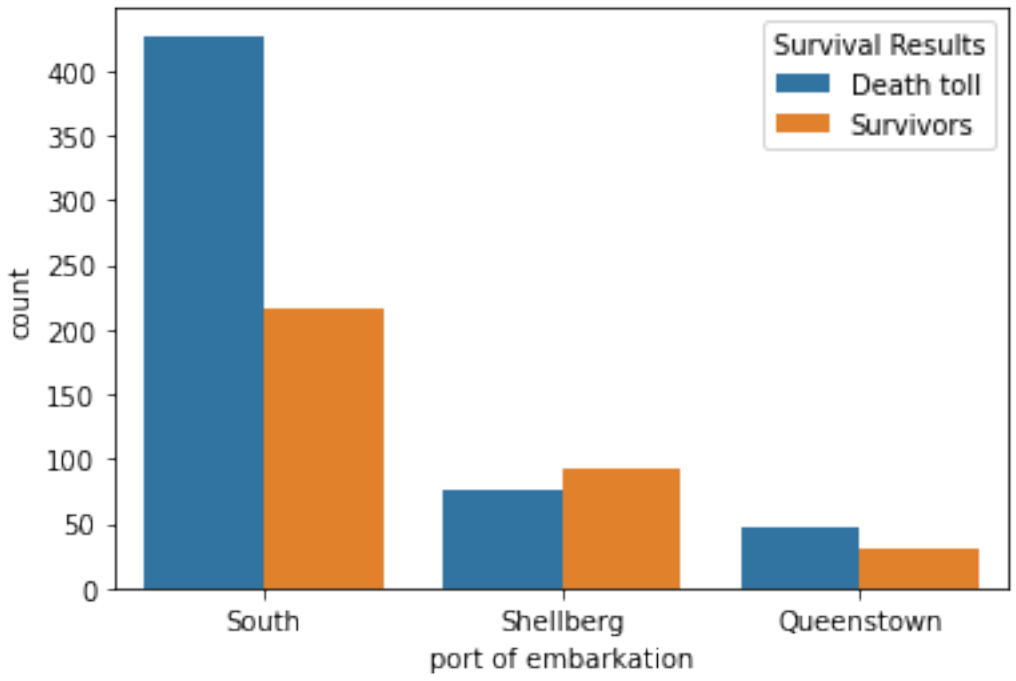

[14]:
```
this['Survival Results'] = this['Survived'].replace(0, 'Death toll').replace(1,␣
↪'Survivors')
this['Seat Class'] = this['Pclass'].replace(1, 'First class').replace(2,␣
↪'Second class').replace(3, 'Third class')
sns.countplot(data=this, x='Seat Class', hue='Survival Results')
```

[14]: <AxesSubplot:xlabel='Seat Class', ylabel='count'>



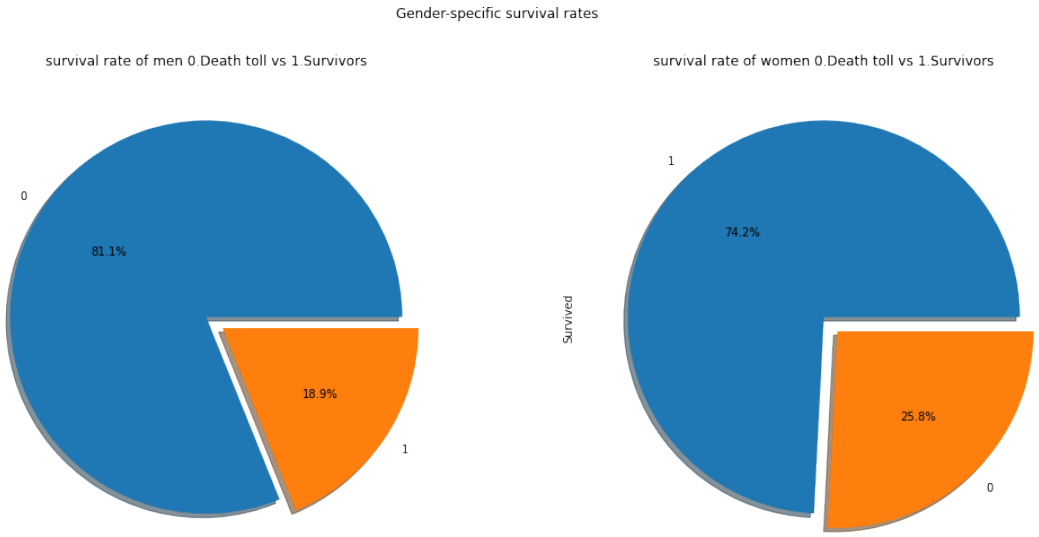
[15]:
```
this['Survival Results'] = this['Survived'].replace(0, 'Death toll').replace(1,␣
↪'Survivors')
this['port of embarkation'] = this['Embarked'].replace('C', 'Shellberg').
↪replace('S', 'South').replace('Q', 'Queenstown')
sns.countplot(data=this, x='port of embarkation', hue='Survival Results')
```

[15]:
```
<AxesSubplot:xlabel='port of embarkation', ylabel='count'>
```




[16]:
```
f, ax = plt.subplots(1, 2, figsize=(18, 8))
male_series = this['Survived'][this['Sex'] == 'male'].value_counts()
female_series = this['Survived'][this['Sex'] == 'female'].value_counts()
male_series.plot.pie(explode=[0, 0.1], autopct='%1.1f%%', ax=ax[0], shadow=True)
female_series.plot.pie(explode=[0, 0.1], autopct='%1.1f%%', ax=ax[1],␣
↪shadow=True)
ax[0].set_title('survival rate of men 0.Death toll vs 1.Survivors')
ax[0].set_ylabel('')
ax[1].set_title('survival rate of women 0.Death toll vs 1.Survivors')
f.suptitle('Gender-specific survival rates')
```

[16]:
```
Text(0.5, 0.98, 'Gender-specific survival rates')
```




[17]:
```
this['port of embarkation'] = this['Embarked'].replace('C', 'Shellberg').
 ↪replace('S', 'South').replace('Q', 'Queenstown')
this['Seat Class'] = this['Pclass'].replace(1, 'First class').replace(2,␣
 ↪'Second class').replace(3, 'Third class')
sns.countplot(data=this, x='Seat Class', hue='port of embarkation')
```

[17]: <AxesSubplot:xlabel='Seat Class', ylabel='count'>