titanic

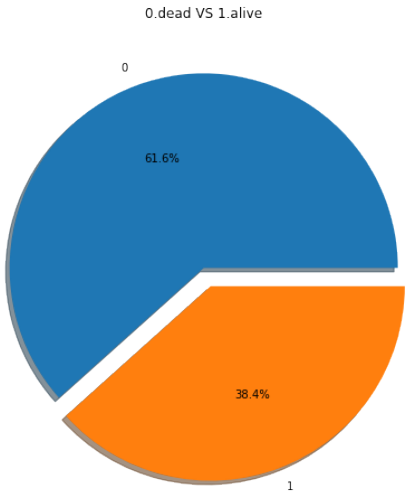
July 30, 2021

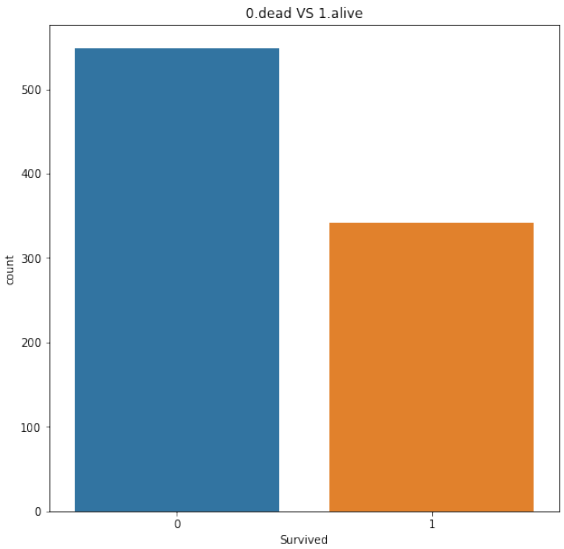
[1]:
```
import pandas as pd
from matplotlib import pyplot as plt
import seaborn as sns
```

[3]:
```
this = pd.read_csv("data/train.csv")
```

[6]:
```
f, ax = plt.subplots(1, 2, figsize=(18, 8))  # f=line, ax=col
series = this['Survived'].value_counts()  # ret data will print in col type =␣
 ↪df->series
"""print(type(series))
print(series)"""
series.plot.pie(explode=[0, 0.1], autopct='%1.1f%%', ax=ax[0], shadow=True)
ax[0].set_title('0.dead VS 1.alive')
ax[0].set_ylabel('')
ax[1].set_title('0.dead VS 1.alive')
sns.countplot('Survived', data=this, ax=ax[1])
plt.show()
```

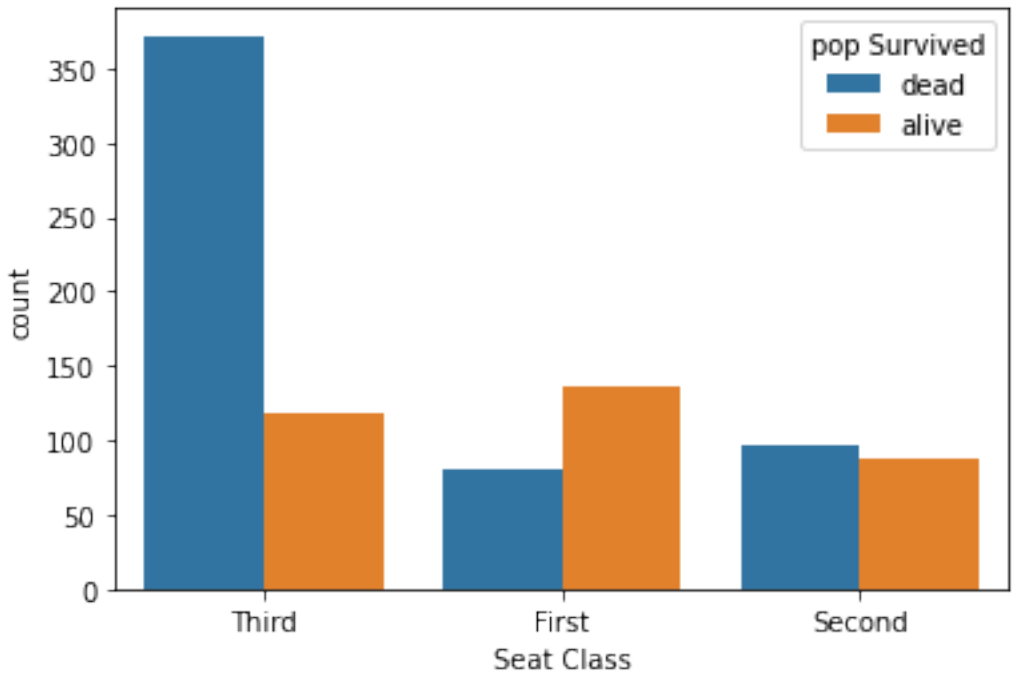
```
/opt/conda/lib/python3.9/site-packages/seaborn/_decorators.py:36: FutureWarning:
Pass the following variable as a keyword arg: x. From version 0.12, the only
valid positional argument will be `data`, and passing other arguments without an
explicit keyword will result in an error or misinterpretation.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





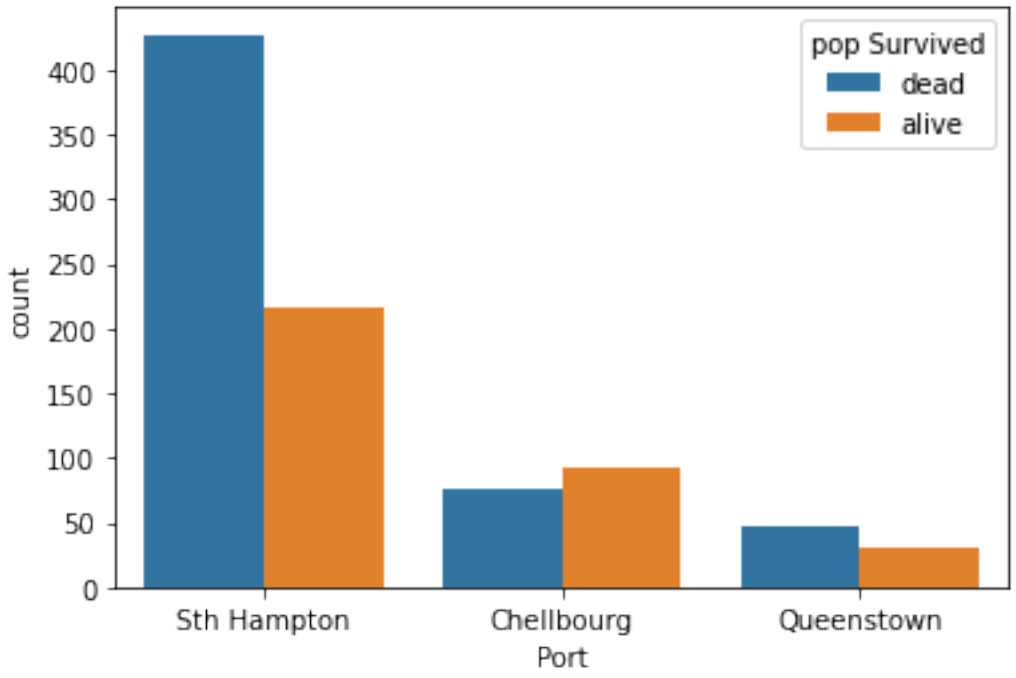
[7]:
```
this['pop Survived'] = this['Survived'].replace(0, 'dead').replace(1, 'alive')
this['Seat Class'] = this['Pclass'].replace(1, 'First').replace(2, 'Second').
 ↪replace(3, 'Third')
sns.countplot(data=this, x='Seat Class', hue='pop Survived')
```

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



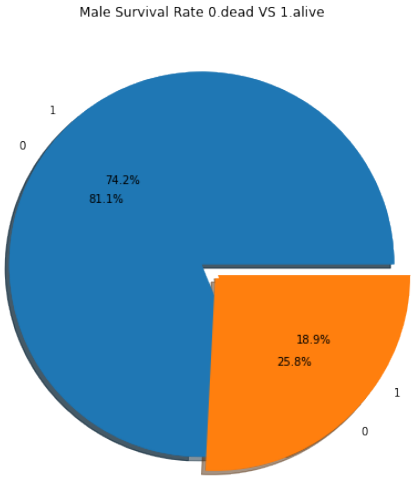
[8]:
```
this['pop Survived'] = this['Survived'].replace(0, 'dead').replace(1, 'alive')
this['Port'] = this['Embarked'].replace('C', 'Chellbourg').replace('S', 'Sth␣
↪Hampton').replace('Q', 'Queenstown')
sns.countplot(data=this, x='Port', hue='pop Survived')
```

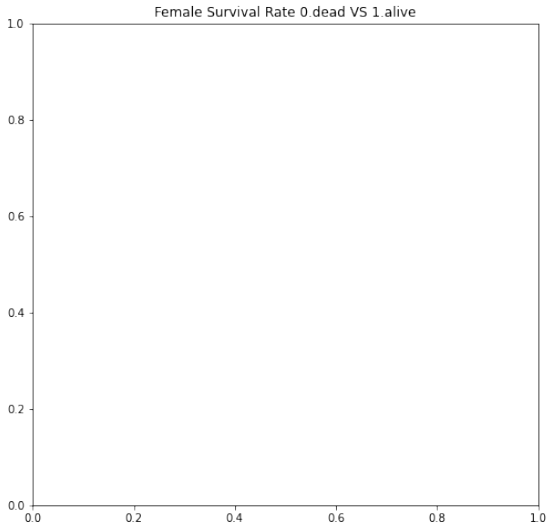
[8]:
```
<AxesSubplot:xlabel='Port', ylabel='count'>
```



[9]:
```
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[0],␣
↪shadow=True)
ax[0].set_title('Male Survival Rate 0.dead VS 1.alive')
ax[0].set_ylabel('')
ax[1].set_title('Female Survival Rate 0.dead VS 1.alive')
```

[9]:
```
Text(0.5, 1.0, 'Female Survival Rate 0.dead VS 1.alive')
```


Male Survival Rate 0.dead VS 1.alive
1
0
74.2%
81.1%
18.9%
25.8%
1
0


Female Survival Rate 0.dead VS 1.alive
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0

[ ]: