9

April 15, 2024

[21]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from seaborn import load_dataset
```

[22]:
```
pwd
```

[22]:
```
'E:\\'
```

[23]:
```
cd E:\
```

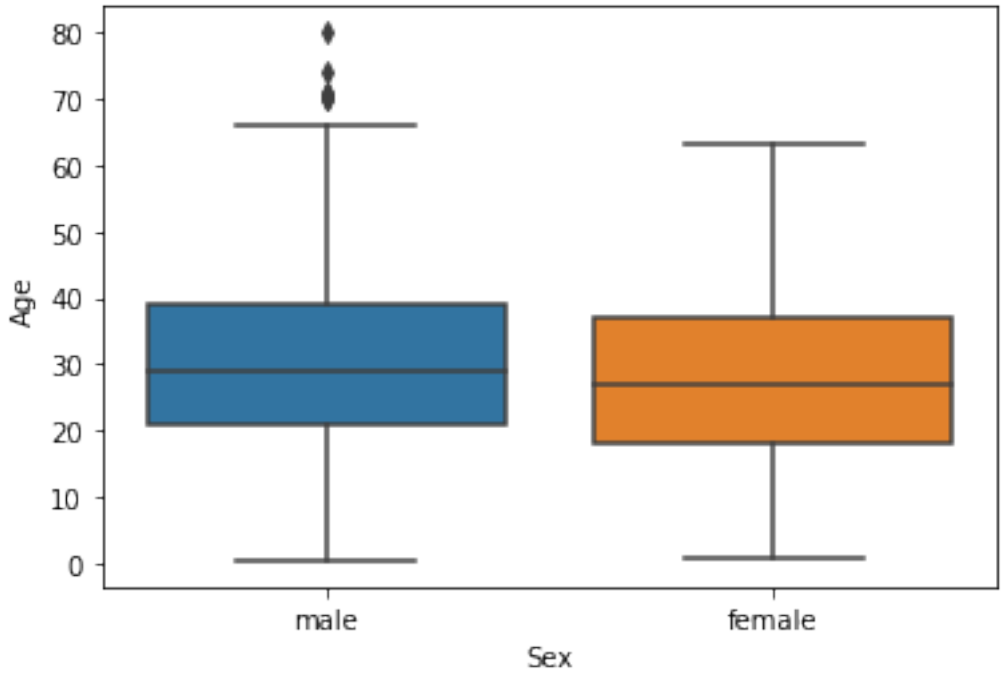
```
E:\
```

[24]:
```
data = pd.read_csv('titanic_train.csv')
```

[25]:
```
tips = load_dataset("tips")
```

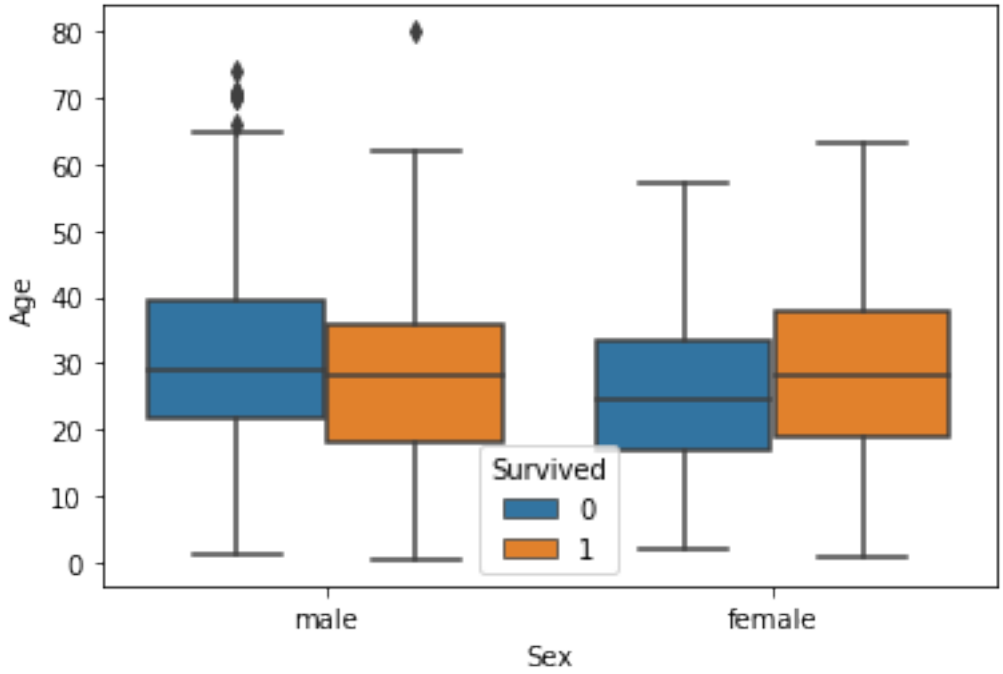
[26]:
```
sns.boxplot(data['Sex'], data['Age'])
```

[26]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x227fe0638b0>
```



[27]:
```
sns.boxplot(data['Sex'], data['Age'], data['Survived'])
```

[27]: <matplotlib.axes._subplots.AxesSubplot at 0x227fe04b7c0>

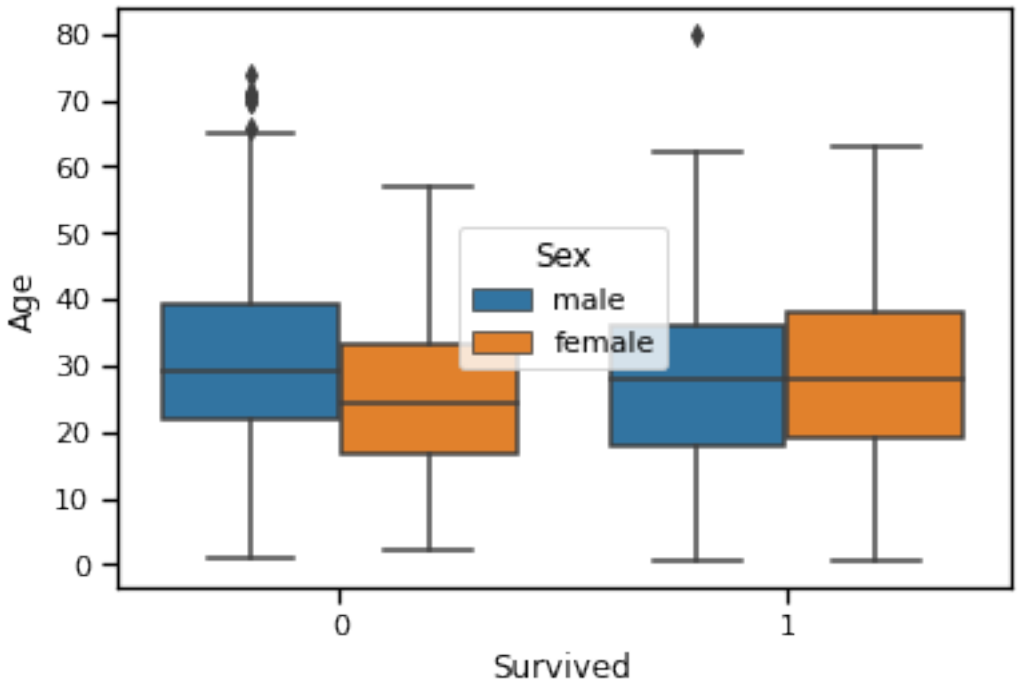


[37]:
```
data
```

[37]:
```
     PassengerId  Survived  Pclass  \
0              1         0       3
1              2         1       1
2              3         1       3
3              4         1       1
4              5         0       3
..           …       …     …
886          887         0       2
887          888         1       1
888          889         0       3
889          890         1       1
890          891         0       3

                                                 Name     Sex   Age  SibSp  \
0                             Braund, Mr. Owen Harris    male  22.0      1
1    Cumings, Mrs. John Bradley (Florence Briggs Th…  female  38.0      1
2                              Heikkinen, Miss. Laina  female  26.0      0
3        Futrelle, Mrs. Jacques Heath (Lily May Peel)  female  35.0      1
4                            Allen, Mr. William Henry    male  35.0      0
..                                                 …     …   …    …
886                            Montvila, Rev. Juozas    male  27.0      0
887                     Graham, Miss. Margaret Edith  female  19.0      0
888         Johnston, Miss. Catherine Helen "Carrie"  female   NaN      1
889                            Behr, Mr. Karl Howell    male  26.0      0
890                              Dooley, Mr. Patrick    male  32.0      0

     Parch            Ticket     Fare Cabin Embarked
0        0         A/5 21171   7.2500   NaN        S
1        0          PC 17599  71.2833   C85        C
2        0  STON/O2. 3101282   7.9250   NaN        S
3        0            113803  53.1000  C123        S
4        0            373450   8.0500   NaN        S
..     …              …      …   …      …
886      0            211536  13.0000   NaN        S
887      0            112053  30.0000   B42        S
888      2        W./C. 6607  23.4500   NaN        S
889      0            111369  30.0000  C148        C
890      0            370376   7.7500   NaN        Q

[891 rows x 12 columns]
```

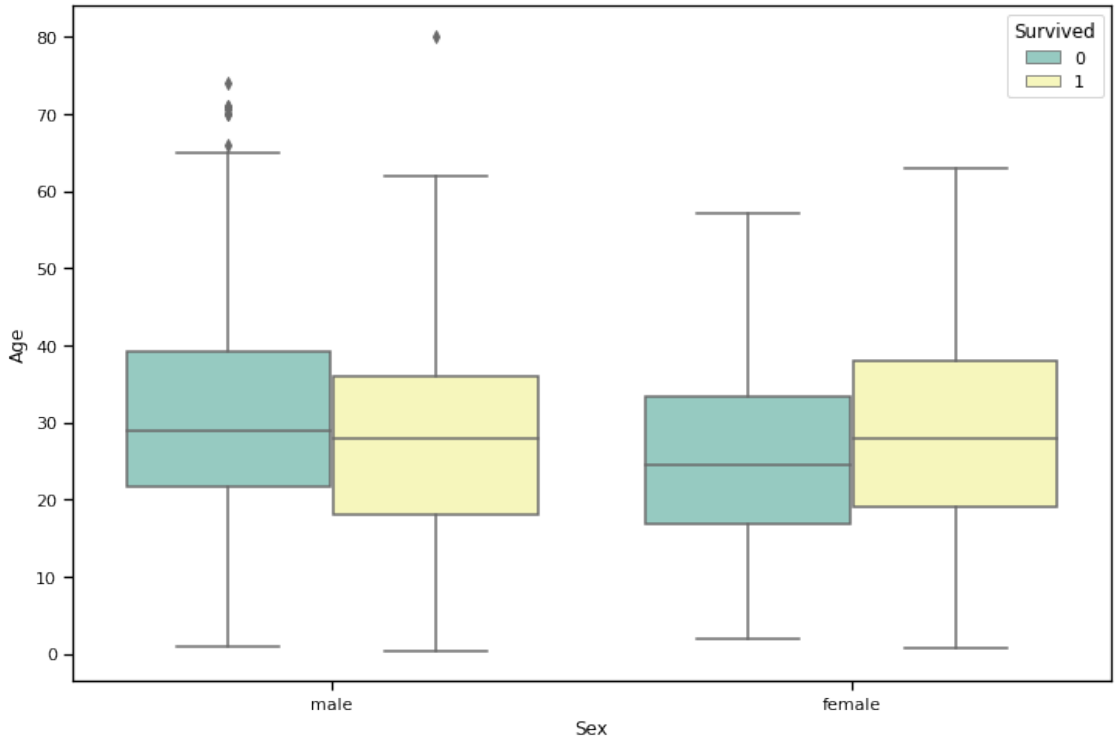
[33]:
```
sns.boxplot(x = 'Survived', y = 'Age', hue = 'Sex', data = data)
```

[33]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x227fe17fdf0>
```



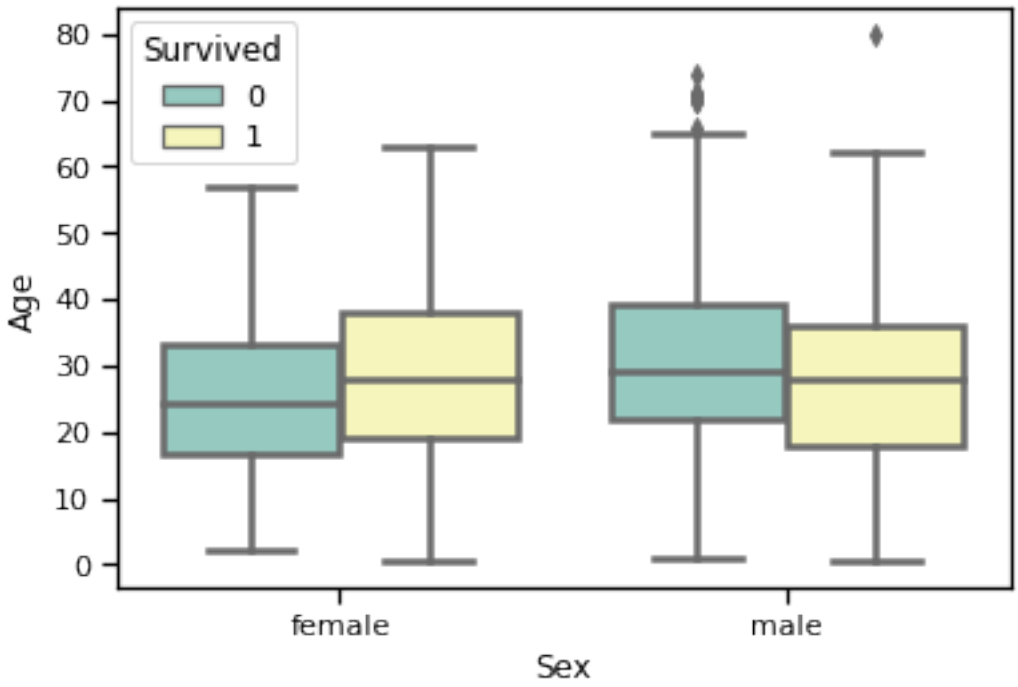
[39]:
```
plt.figure(figsize = (12, 8))
sns.boxplot(x = 'Sex', y = 'Age', hue = 'Survived', palette = 'Set3', data =␣
↪data)
```

[39]: <matplotlib.axes._subplots.AxesSubplot at 0x227fe235a30>



[40]:
```
sns.boxplot(x = 'Sex', y = 'Age', hue = 'Survived', palette = 'Set3', data =␣
↪data, linewidth = 2.5, order = ['female', 'male'])
```

[40]: <matplotlib.axes._subplots.AxesSubplot at 0x227fe46ec10>


Survived
0
1
80
70
60
50
40
30
20
10
0
Age
female
male
Sex