p8

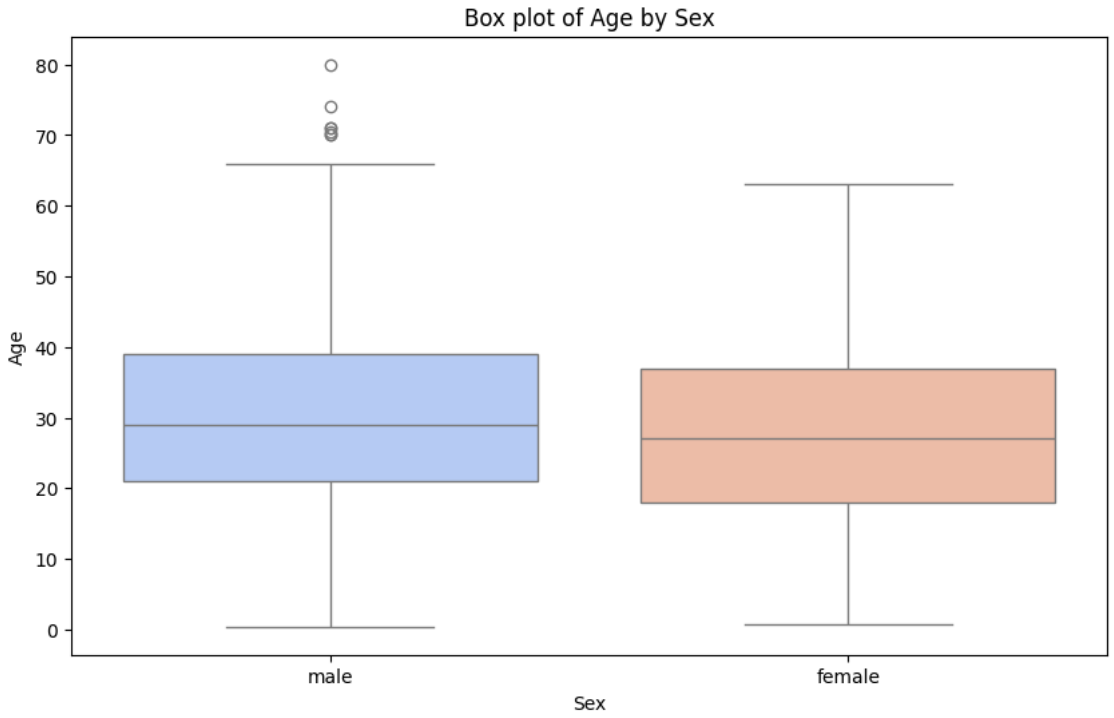
March 30, 2024

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

df = sns. load_dataset('titanic')
df= df[['sex','age','survived']]
print(df.head())
print("\n\n", df.dtypes)
```

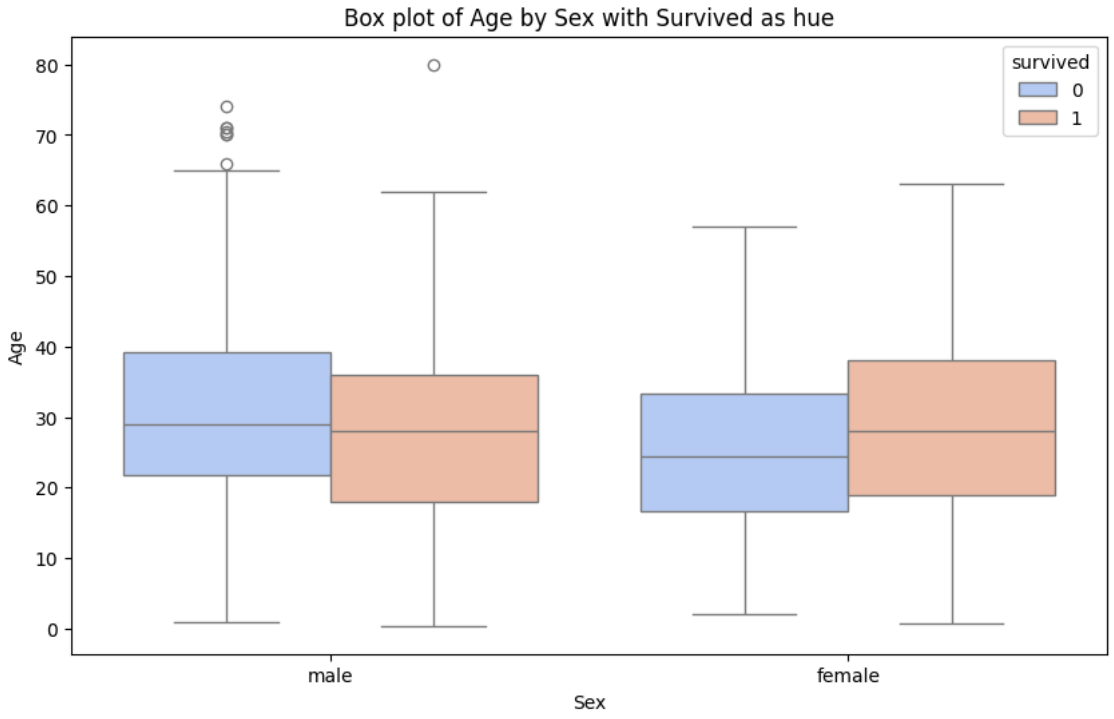
```
      sex   age  survived
0    male  22.0         0
1  female  38.0         1
2  female  26.0         1
3  female  35.0         1
4    male  35.0         0


 sex          object
age          float64
survived       int64
dtype: object
```

[2]:
```
# Create a new figure and a set of subplots
plt.figure(figsize=(10, 6))

# Create a box plot for 'sex' and 'age' with a custom color palette
sns.boxplot(x='sex', y='age', data=df, palette='coolwarm')

# Set the title of the box plot
plt.title('Box plot of Age by Sex')

# Set the x and y axis labels
plt.xlabel('Sex')
plt.ylabel('Age')

# Display the box plot
plt.show()
```

```
<ipython-input-2-73f186ad524b>:5: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in
v0.14.0. Assign the `x` variable to `hue` and set `legend=False` for the same
effect.

  sns.boxplot(x='sex', y='age', data=df, palette='coolwarm')
```



[3]:
```
# Create a new figure and a set of subplots
plt.figure(figsize=(10, 6))

# Create a box plot for 'sex' and 'age' with 'survived' as hue and a custom␣
 ↪color palette
sns.boxplot(x='sex', y='age', hue='survived', data=df, palette='coolwarm')

# Set the title of the box plot
plt.title('Box plot of Age by Sex with Survived as hue')

# Set the x and y axis labels
plt.xlabel('Sex')
plt.ylabel('Age')

# Display the box plot
plt.show()
```


Box plot of Age by Sex with Survived as hue
survived
0
1
Age
80
70
60
50
40
30
20
10
0
male
female
Sex

[ ]: