

Boxplots

A box plot is a standardized way of displaying the distribution of data based on a five number summary ("minimum", first quartile (Q1), median, third quartile (Q3), and "maximum"). It can tell you about your outliers and what their values are. It can also tell you if your data is symmetrical, how tightly your data is grouped, and if and how your data is skewed.

```
In [4]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

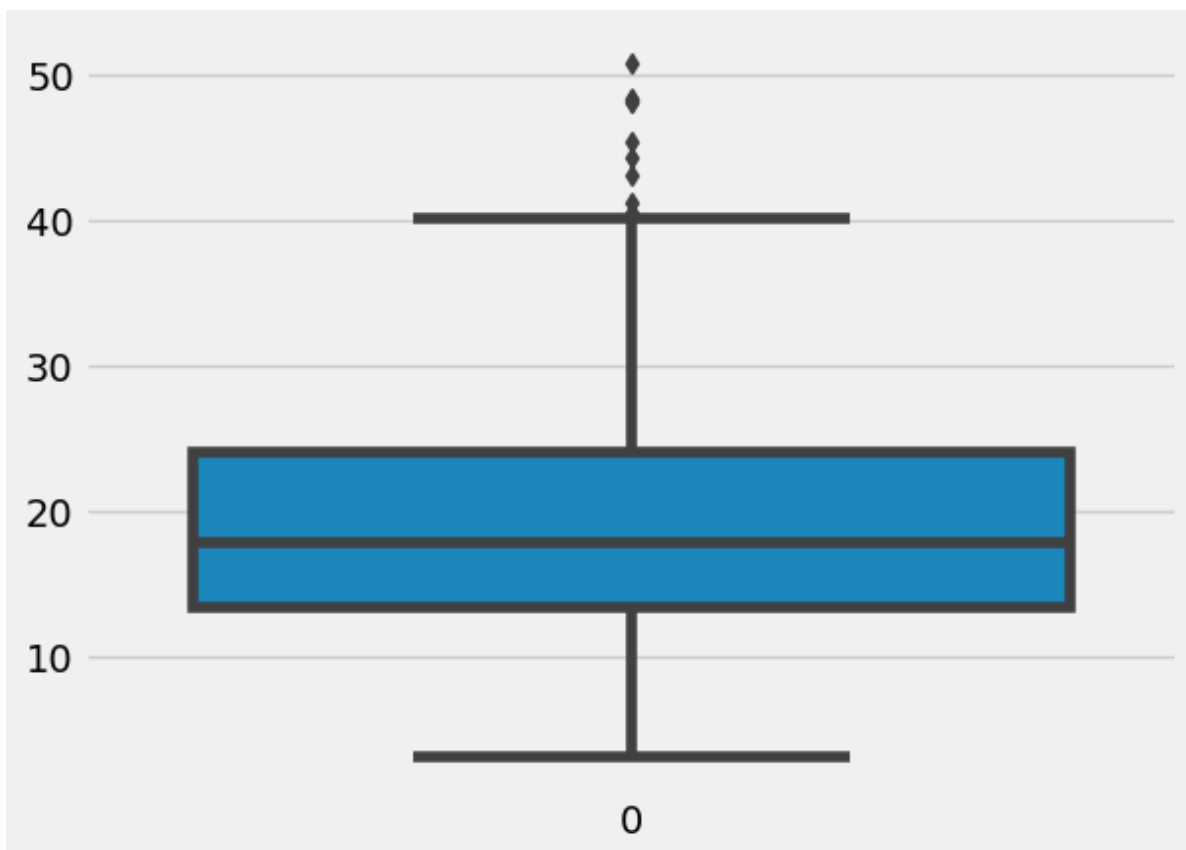
```
In [11]: plt.style.use('fivethirtyeight')
```

```
In [12]: tips=sns.load_dataset('tips')
```

```
In [14]: # univariate

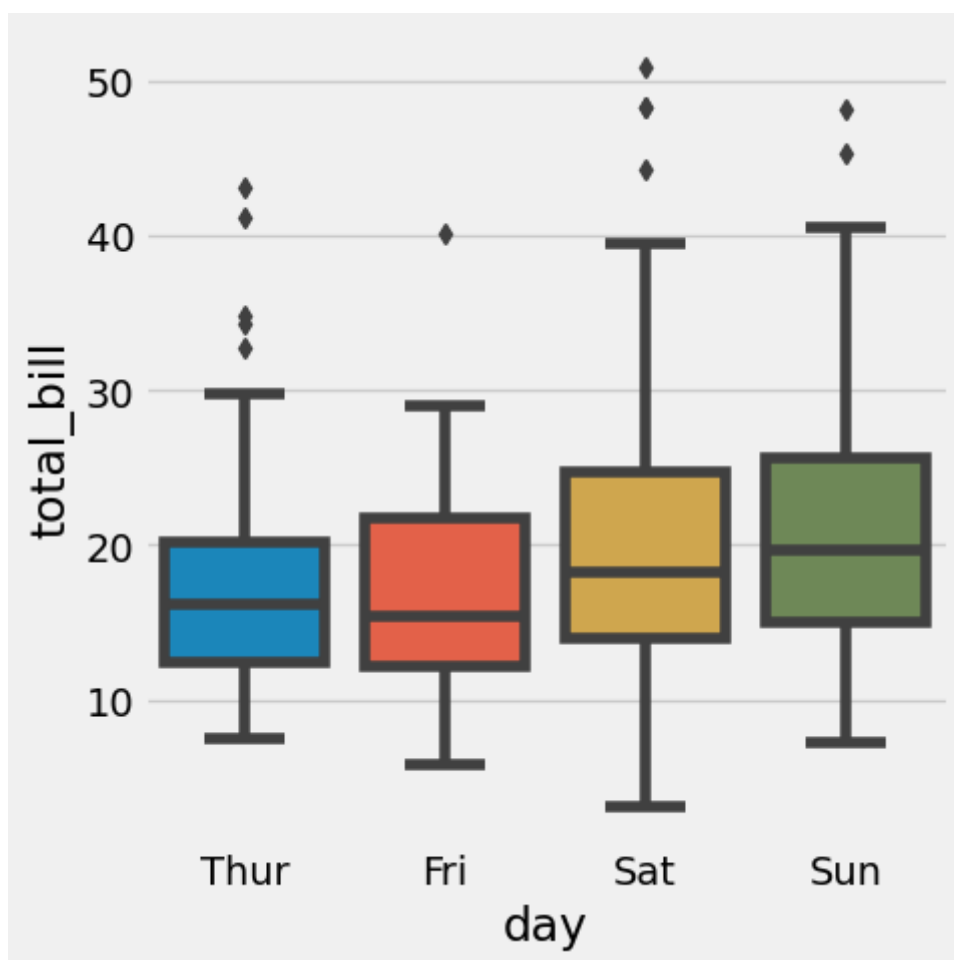
sns.boxplot(tips['total_bill'])
```

Out[14]: <Axes: >



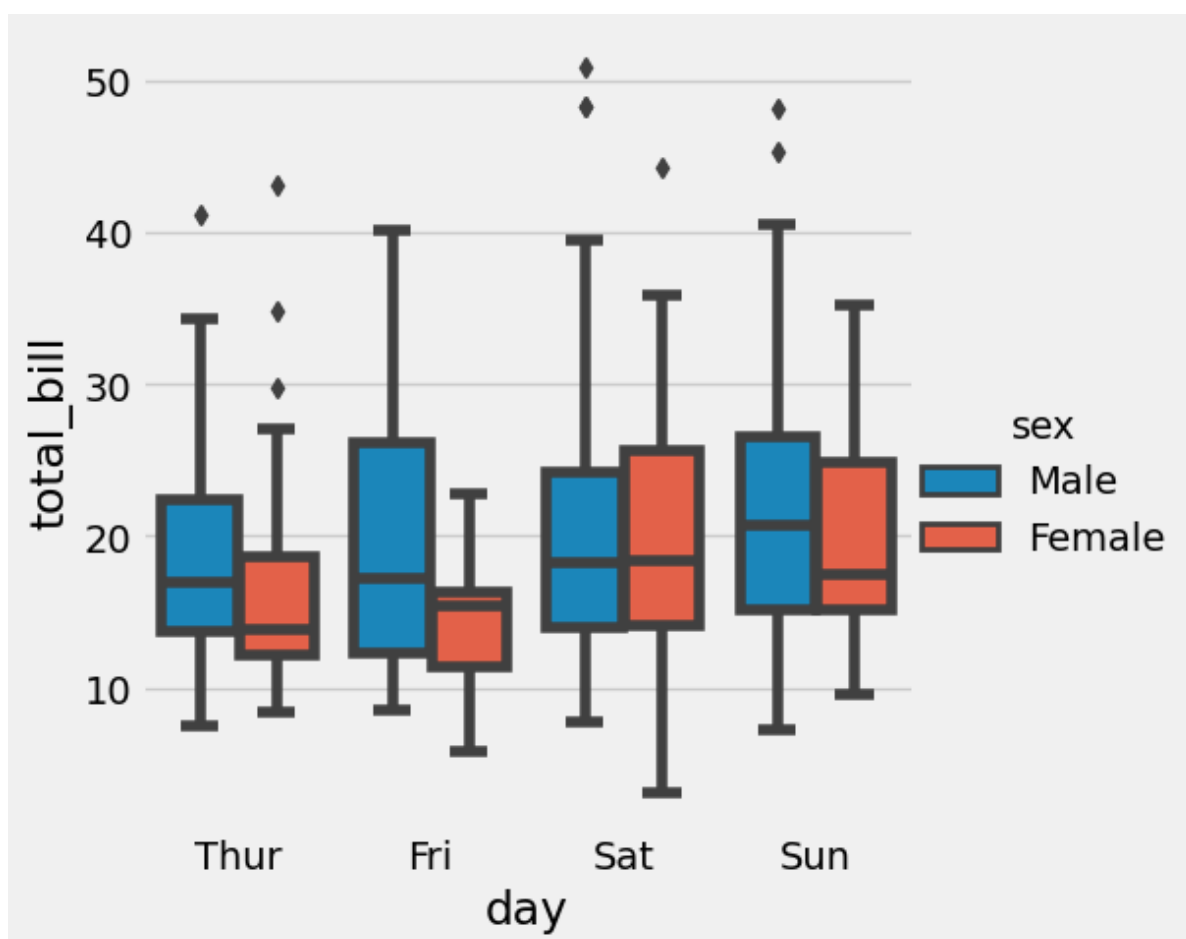
```
In [15]: sns.catplot(x='day', y='total_bill', kind='box', data=tips)
```

Out[15]: <seaborn.axisgrid.FacetGrid at 0x1c9309570d0>



```
In [16]: sns.catplot(x='day', y='total_bill', hue='sex', kind='box', data=tips)
```

```
Out[16]: <seaborn.axisgrid.FacetGrid at 0x1c931e1d1e0>
```



In []: