Bar Plot

Let's create a simple bar plot using the bar method. The output with matplotlib is shown in Figure 12-3, and the output with seaborn is shown in Figure 12-4.

```
states = ["Cross River", "Lagos", "Rivers", "Kano"]
population = [3737517, 17552940, 5198716, 11058300]
# create barplot using matplotlib
plt.bar(states, population)
plt.show()
# create barplot using seaborn
sns.barplot(x=states, y=population)
plt.show()
```

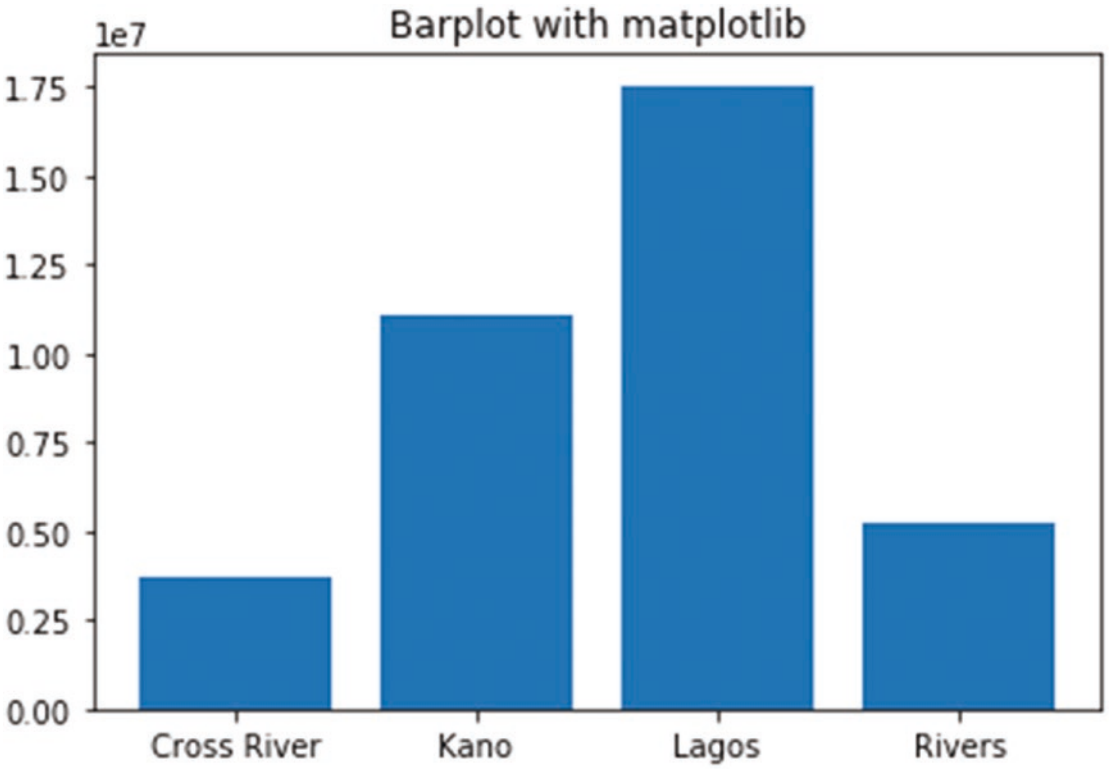

Figure 12-3. *Barplot with Matplotlib*

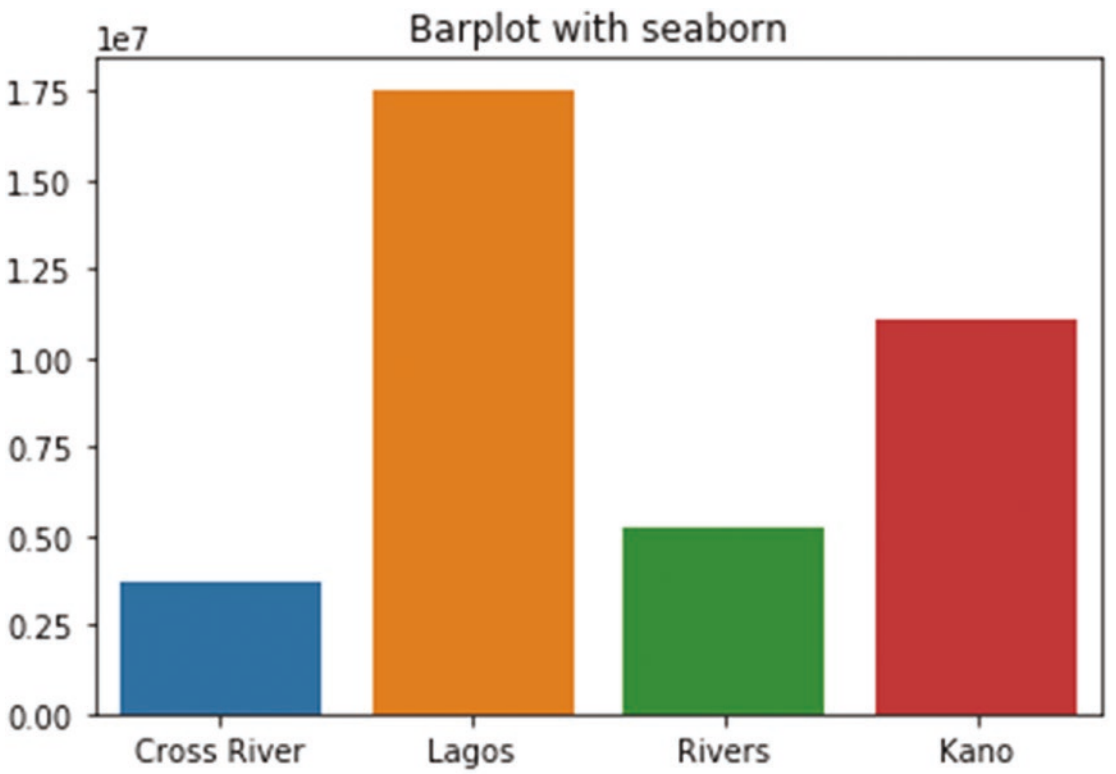

Figure 12-4. *Barplot with seaborn*

Histogram/Density Plots

Histogram and density plots are essential for examining the statistical distribution of a variable. For a simple histogram, we'll create a set of 100,000 points from the normal distribution. The outputs with matplotlib and seaborn are shown in Figure 12-5 and Figure 12-6, respectively.

```
# create 100000 data points from the normal distributions
data = np.random.randn(100000)
# create a histogram plot
plt.hist(data)
plt.show()
# crate a density plot using seaborn
my_fig = sns.distplot(data, hist=False)
plt.show()
```