## General Statistics Plot (Matplotlib or Seaborn):

```python
import seaborn as sns
import matplotlib.pyplot as plt
from sklearn.datasets import load_iris
import pandas as pd

# Load Iris dataset
iris = load_iris()
iris_df = pd.DataFrame(data=iris.data, columns=iris.feature_names)
iris_df['species'] = iris.target

# Map target numbers to species names
species_map = {0: 'setosa', 1: 'versicolor', 2: 'virginica'}
iris_df['species'] = iris_df['species'].map(species_map)

# Plot pairplot
sns.pairplot(iris_df, hue='species')
#show the plot
plt.show()
```
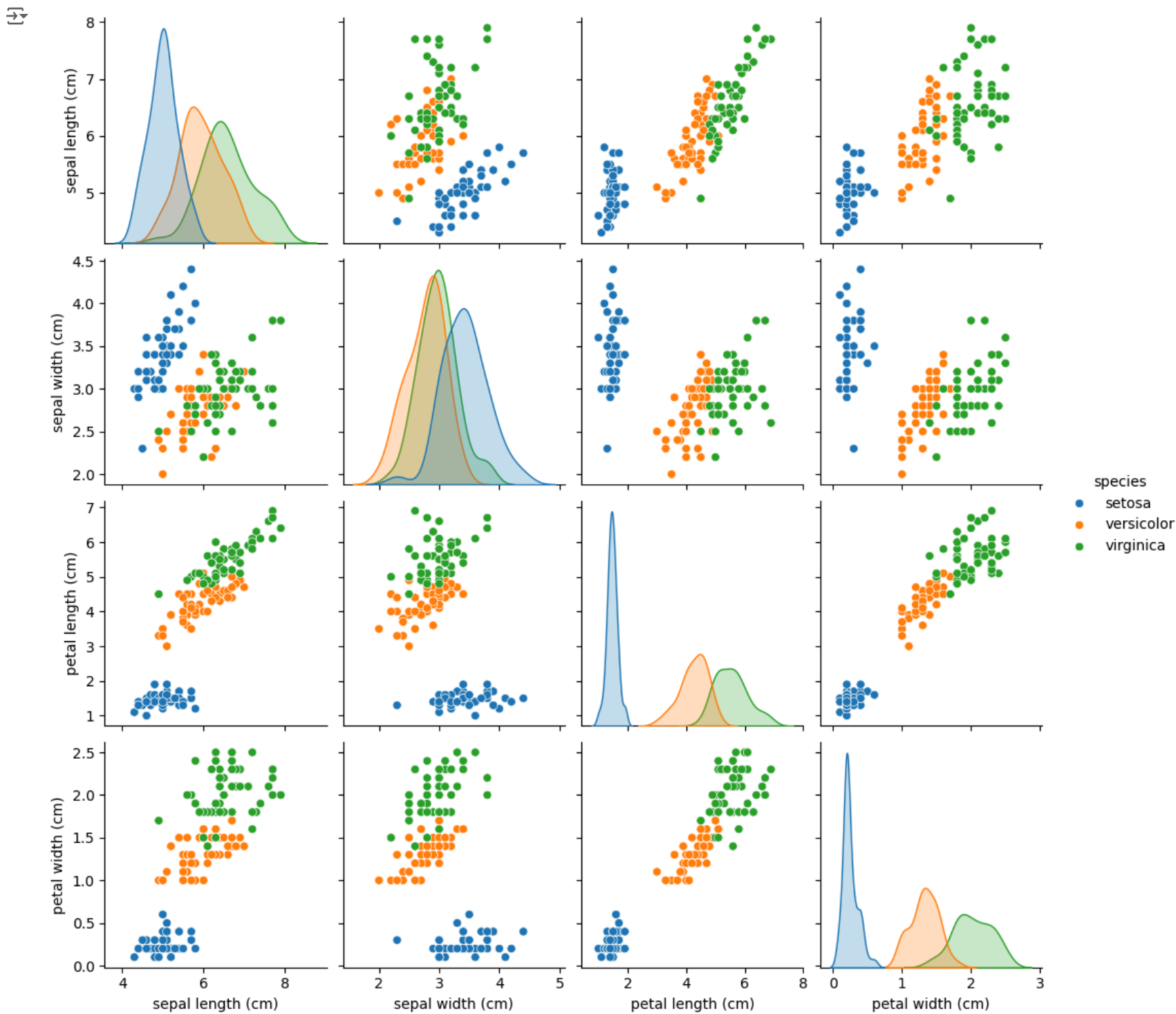

Pie Plot for Species Frequency:

```python
import matplotlib.pyplot as plt

# Count frequency of each species
species_counts = iris_df['species'].value_counts()

# Plot pie chart
plt.figure(figsize=(8, 6))
plt.pie(species_counts, labels=species_counts.index, autopct='%1.1f%%', startangle=140)
#set the plot title
plt.title('Frequency of Each Iris Species')
#show the plot
plt.show()
```

Frequency of Each Iris Species
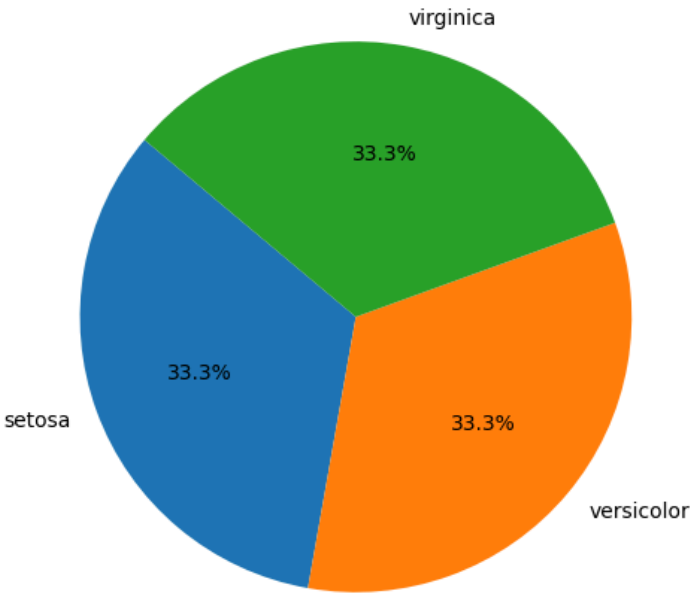
Relationship Between Sepal Length and Width:

```
import matplotlib.pyplot as plt

# Scatter plot of Sepal Length vs Sepal Width
plt.figure(figsize=(8, 6))
plt.scatter(iris_df['sepal length (cm)'], iris_df['sepal width (cm)'], c=iris_df['species'].astype('category').cat.codes, cmap='viridis')
plt.xlabel('Sepal Length (cm)')
plt.ylabel('Sepal Width (cm)')
plt.title('Sepal Length vs Sepal Width')
plt.colorbar(label='Species')
plt.show()
```
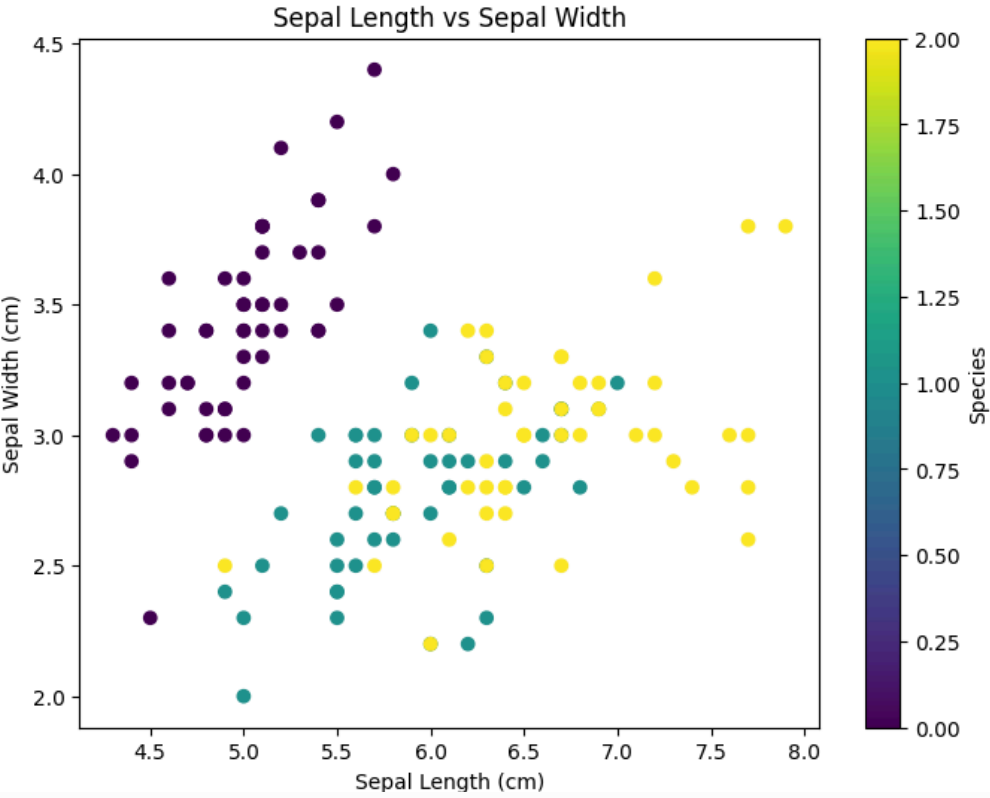

Distribution of Sepal and Petal Features:

```
import seaborn as sns
import matplotlib.pyplot as plt

# Create distribution plots
plt.figure(figsize=(14, 10))

# Sepal Length
plt.subplot(2, 2, 1)
sns.histplot(iris_df['sepal length (cm)'], kde=True)
plt.title('Distribution of Sepal Length')

# Sepal Width
plt.subplot(2, 2, 2)
sns.histplot(iris_df['sepal width (cm)'], kde=True)
plt.title('Distribution of Sepal Width')

# Petal Length
plt.subplot(2, 2, 3)
sns.histplot(iris_df['petal length (cm)'], kde=True)
plt.title('Distribution of Petal Length')

# Petal Width
plt.subplot(2, 2, 4)
sns.histplot(iris_df['petal width (cm)'], kde=True)
plt.title('Distribution of Petal Width')

plt.tight_layout()
```
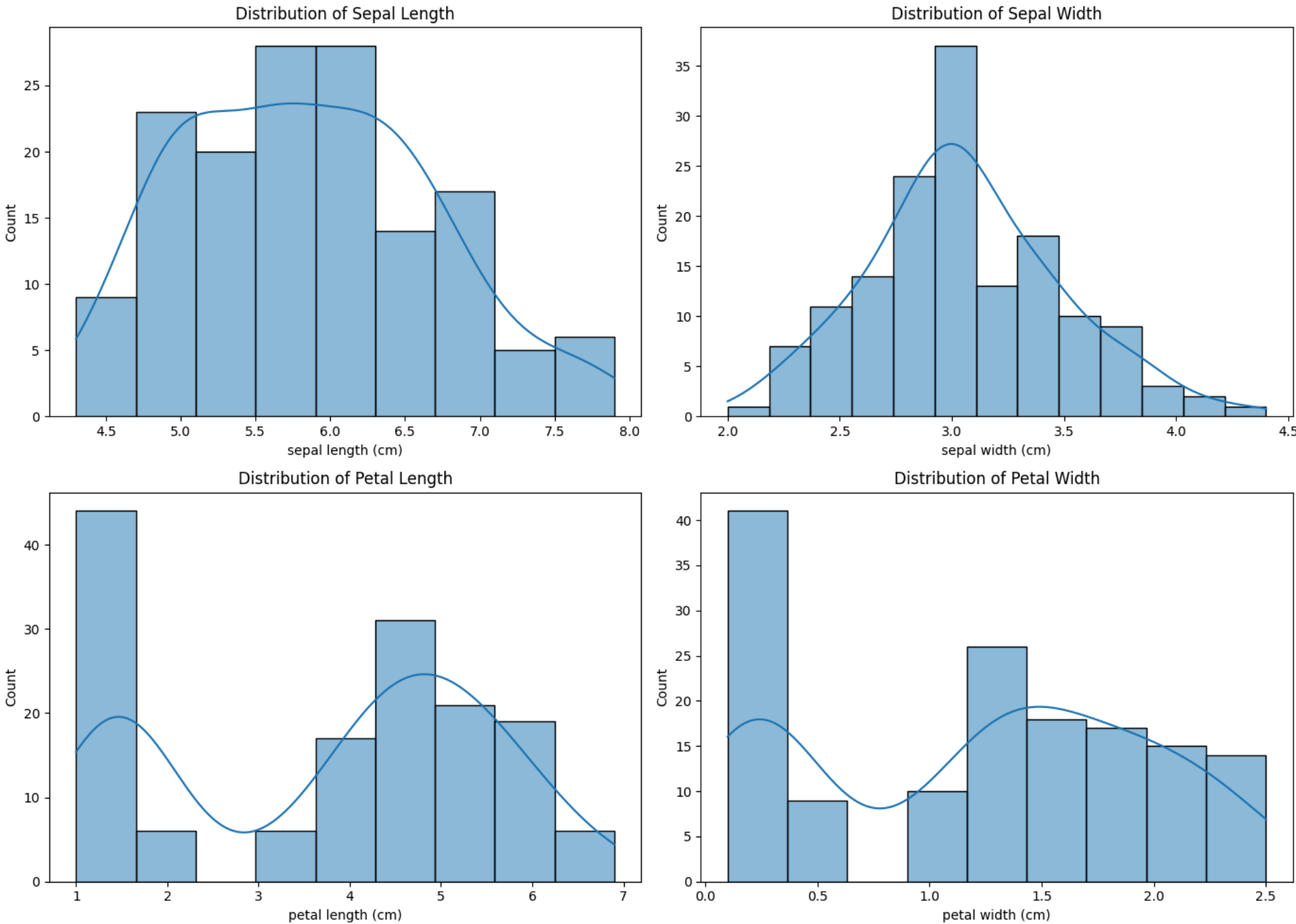
```
plt.show()
```


Distribution of Sepal Length / Distribution of Sepal Width / Distribution of Petal Length / Distribution of Petal Width

Jointplot of Sepal Length vs Sepal Width:

```python
import seaborn as sns
import matplotlib.pyplot as plt

# Joint plot of Sepal Length vs Sepal Width
sns.jointplot(data=iris_df, x='sepal length (cm)', y='sepal width (cm)', kind='scatter', hue='species')
plt.show()
```
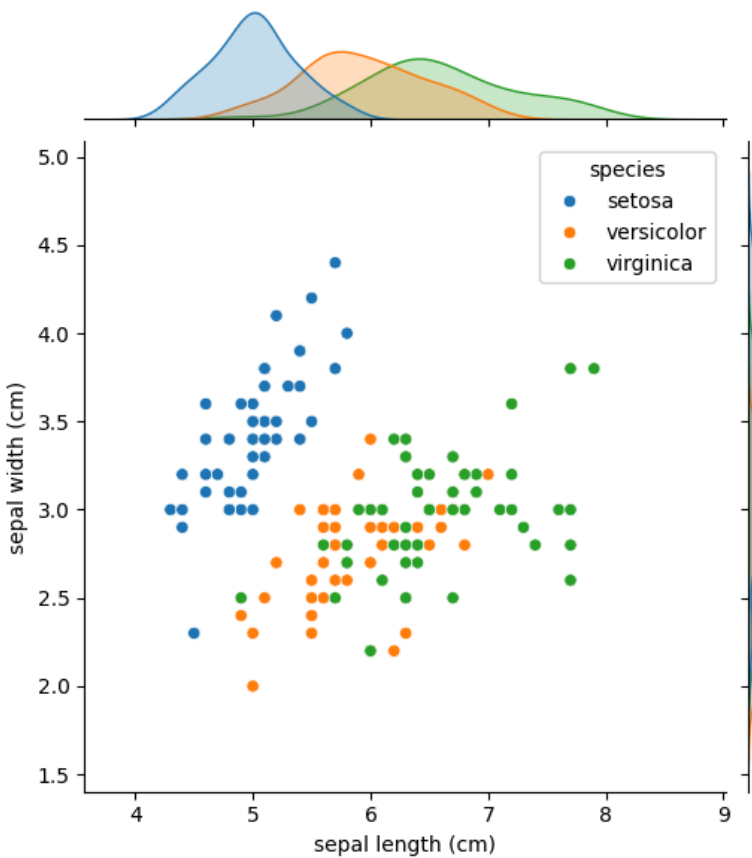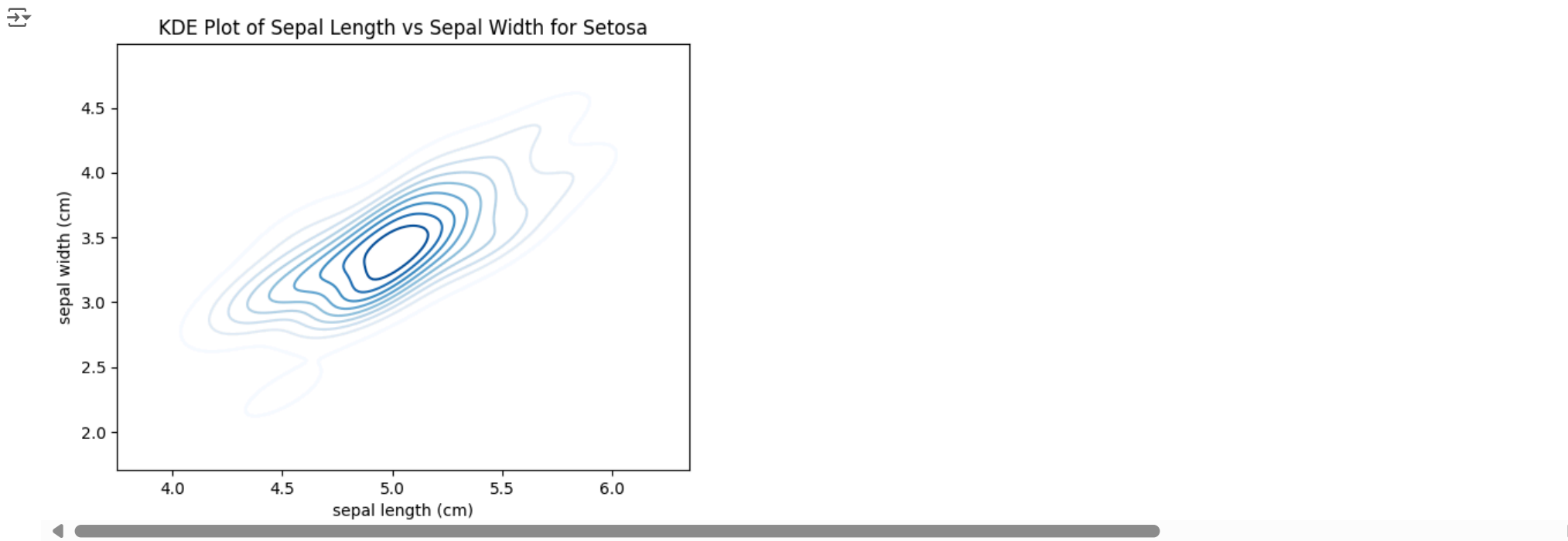

KDE Plot for Setosa Species (Sepal Length vs Sepal Width):

```
import seaborn as sns
import matplotlib.pyplot as plt

# Filter for Setosa species
setosa_df = iris_df[iris_df['species'] == 'setosa']

# KDE Plot for Setosa Species (Sepal Length vs Sepal Width)
sns.kdeplot(data=setosa_df, x='sepal length (cm)', y='sepal width (cm)', cmap='Blues')
plt.title('KDE Plot of Sepal Length vs Sepal Width for Setosa')
plt.show()
```
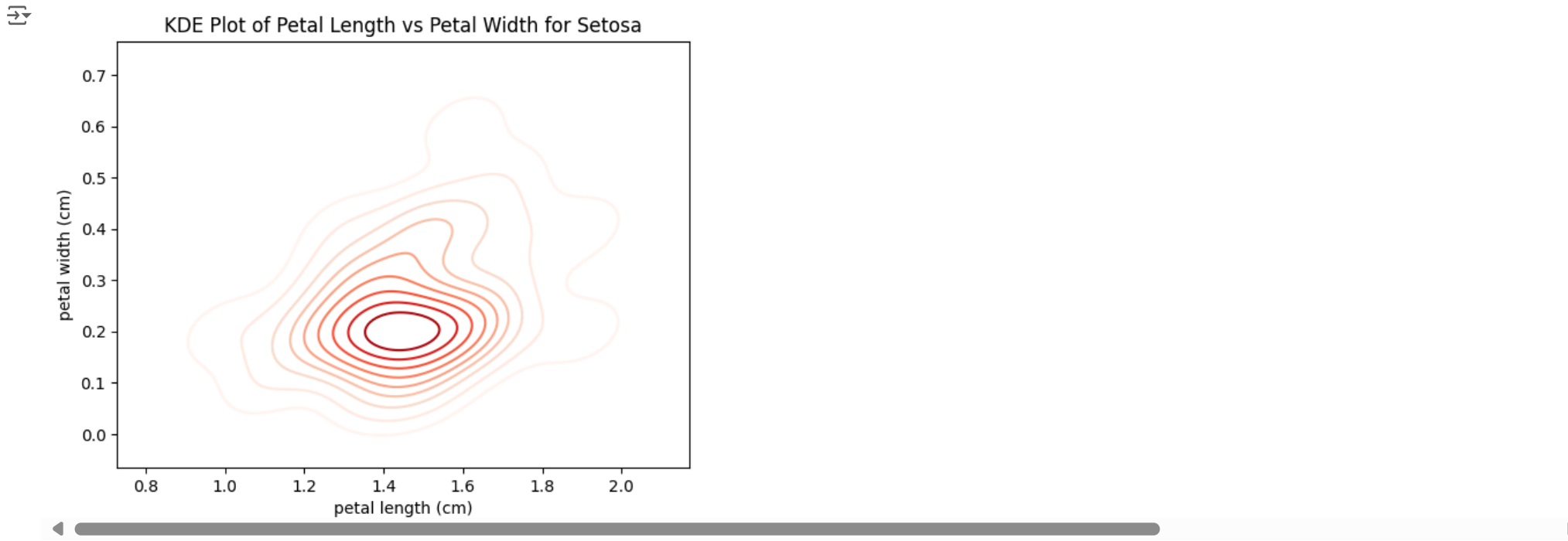

KDE Plot of Sepal Length vs Sepal Width for Setosa

KDE Plot for Setosa Species (Petal Length vs Petal Width):

```
import seaborn as sns
import matplotlib.pyplot as plt

# KDE Plot for Setosa Species (Petal Length vs Petal Width)
sns.kdeplot(data=setosa_df, x='petal length (cm)', y='petal width (cm)', cmap='Reds')
plt.title('KDE Plot of Petal Length vs Petal Width for Setosa')
plt.show()
```


KDE Plot of Petal Length vs Petal Width for Setosa

Double-click (or enter) to edit