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

df = pd.read_csv('mushroom.csv')

plt.figure(figsize=(8, 6))
sns.countplot(x='class', data=df)
plt.title('Count of Edible vs. Poisonous Mushrooms')
plt.xlabel('Class')
plt.ylabel('Count')
plt.show()

plt.figure(figsize=(8, 6))
df['cap-color'].value_counts().plot(kind='pie', autopct='%1.1f%%')
plt.title('Distribution of Cap Colors')
plt.ylabel('')
plt.show()

plt.figure(figsize=(10, 6))
sns.countplot(x='habitat', data=df)
plt.title('Number of Mushrooms in Each Habitat')
plt.xlabel('Habitat')
plt.ylabel('Count')
plt.xticks(rotation=45)
plt.show()

plt.figure(figsize=(8, 6))
sns.scatterplot(x='cap-color', y='stalk-color-above-ring', hue='class', data=df)
plt.title('Cap Color vs. Stalk Color')
plt.xlabel('Cap Color')
plt.ylabel('Stalk Color Above Ring')
plt.legend(title='Class')
plt.show()
```