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Roll no= 405

import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

data=pd.read\_csv('/content/grainsales.csv')

top\_10\_grains = data['GrainName'].value\_counts().head(10).index.tolist()

subset\_data = data[data['GrainName'].isin(top\_10\_grains)]

plt.figure(figsize=(10, 6))

plt.bar(subset\_data['GrainName'], subset\_data['Sales'])

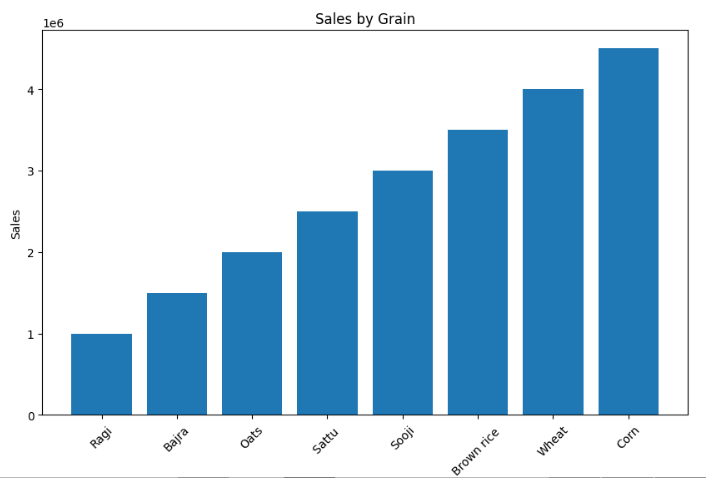
plt.title('Sales by Grain')

plt.xlabel('Grain')

plt.ylabel('Sales')

plt.xticks(rotation=45)

plt.show()



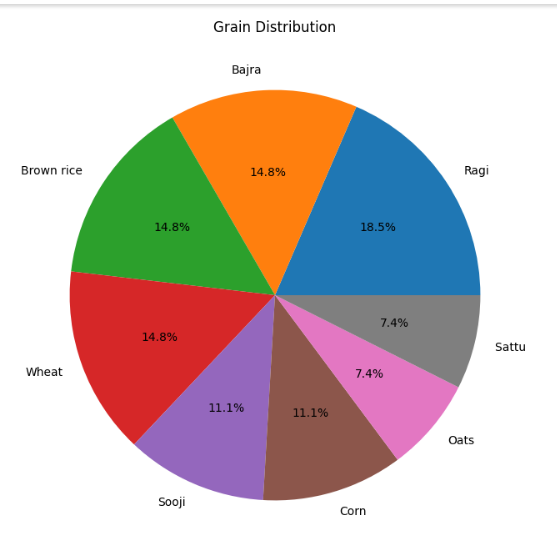
plt.figure(figsize=(8, 8))

subset\_data['GrainName'].value\_counts().plot.pie(autopct='%1.1f%%')

plt.title('Grain Distribution')

plt.ylabel('')

plt.show()



plt.figure(figsize=(10, 6))

plt.boxplot([subset\_data[subset\_data['GrainName'] == grain]['Sales']

for grain in top\_10\_grains], labels=top\_10\_grains)

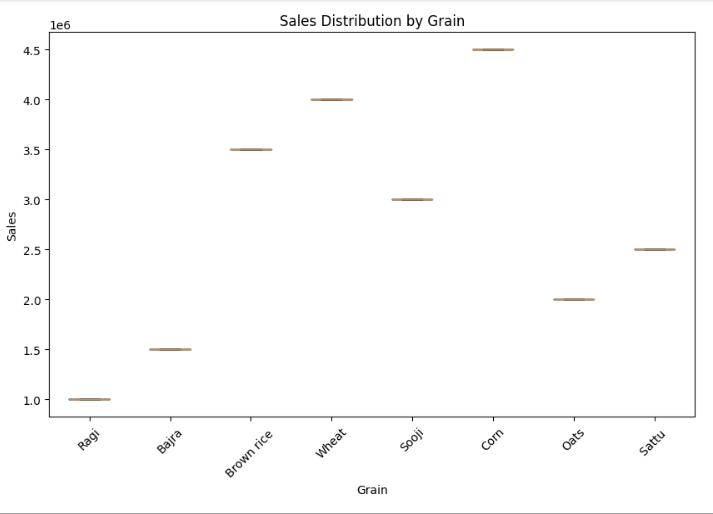
plt.title('Sales Distribution by Grain')

plt.xlabel('Grain')

plt.ylabel('Sales')

plt.xticks(rotation=45)

plt.show()



plt.figure(figsize=(10, 6))

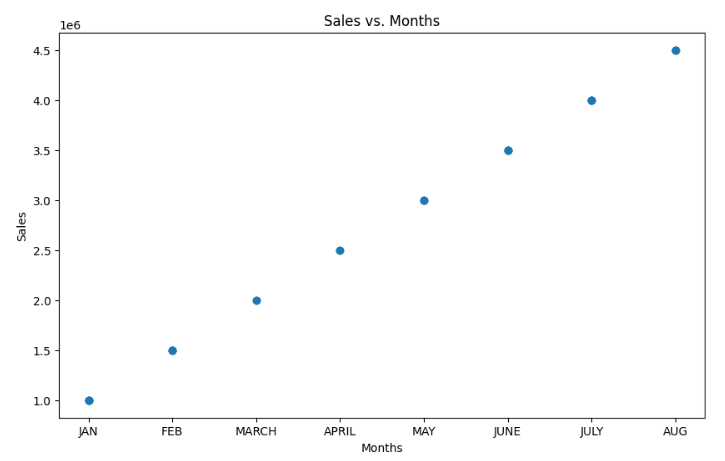
plt.scatter(data['Months'], data['Sales'])

plt.title('Sales vs. Months')

plt.xlabel('Months')

plt.ylabel('Sales')

plt.show()



plt.figure(figsize=(10, 6))

plt.hist(data['Sales'], bins=10, edgecolor='black')

plt.title('Distribution of Sales')

plt.xlabel('Sales')

plt.ylabel('Frequency')

plt.show()

