**9.Univariate and Bivariate Analysis of Sales Data**

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**Objective:** To analyze the distribution and relationships of key variables in a sales dataset.

**Dataset:** A dataset containing sales data with columns such as Sales, Profit, Region,Product\_Category, and Order\_Date.

**Code:**

import pandas as pd

import seaborn as sns

import matplotlib.pyplot as plt

# Load dataset

data = pd.read\_csv('stores.csv')

# Summary Statistics

print(data.describe())

# univariate analysis

data['TotalSales'].hist(bins=20)

plt.title('Store Sales Distribution')

plt.show()

data['Total\_Customers'].hist(bins=20)

plt.title('customer count')

plt.show()

# Bivariate Analysis

sns.scatterplot(x='TotalSales', y='Total\_Customers', data=data)

plt.title('Sales vs customer count')

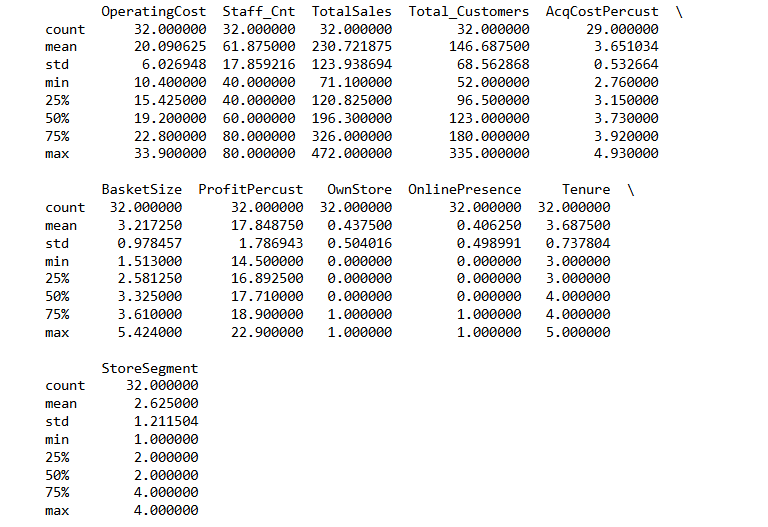
plt.show()

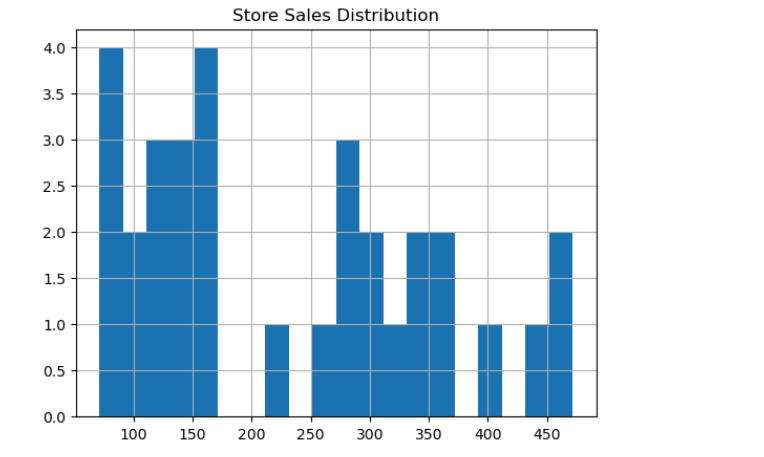
sns.heatmap(data.corr(), annot=True, cmap='coolwarm')

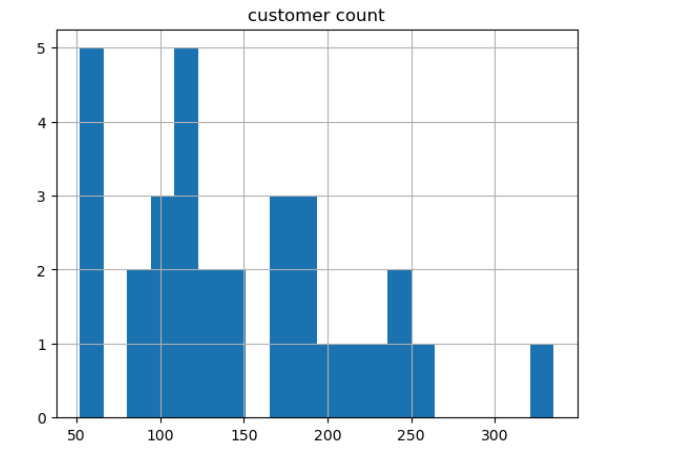
plt.title('Correlation Matrix')

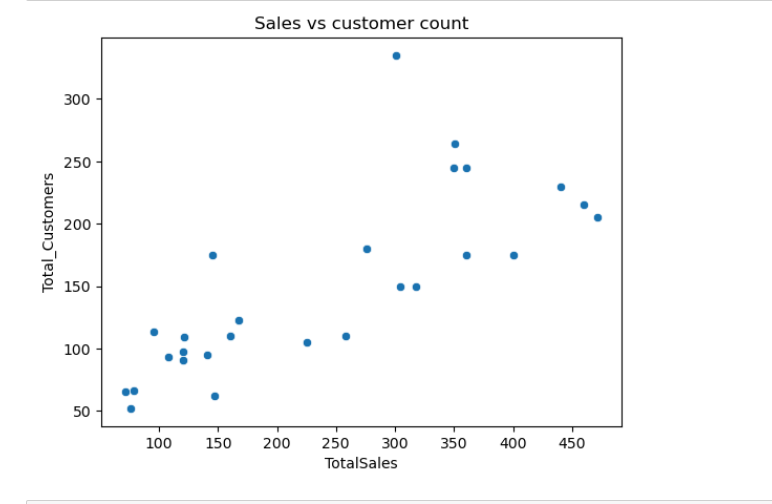
plt.show()

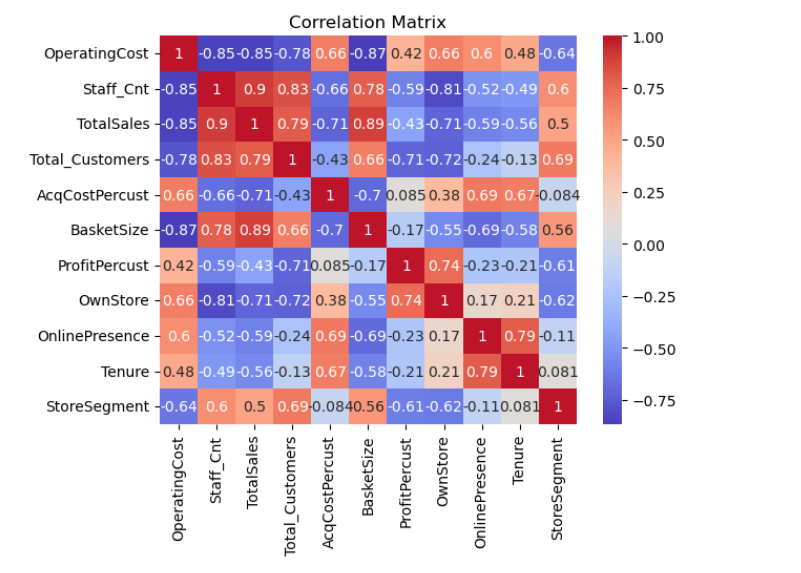
**OUTPUT:**

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