```
import pandas as pd
# Load the data
file_path = '/content/Stores.csv'
df = pd.read csv(file path)
print(df.info())
print(df.head())
print(df.isnull().sum())
print(df.describe())
<<class 'pandas.core.frame.DataFrame'>
     RangeIndex: 896 entries, 0 to 895
     Data columns (total 5 columns):
                                Non-Null Count Dtype
     # Column
     ---
     0 Store ID
                                896 non-null
                                                int64
         Store_Area
                                896 non-null
                                                int64
          Items_Available
                                896 non-null
                                                int64
         Daily_Customer_Count
                                896 non-null
                                                int64
         Store_Sales
                                896 non-null
                                                int64
     dtypes: int64(5)
     memory usage: 35.1 KB
     None
                               Items_Available Daily_Customer_Count
        Store ID
                   Store_Area
                                                                      Store_Sales
     0
                                          1961
                                                                             66490
                1
                         1659
                                                                 530
                2
                                          1752
                                                                 210
                                                                             39820
     1
                         1461
     2
                3
                         1340
                                          1609
                                                                 720
                                                                             54010
                                          1748
                                                                             53730
     3
                         1451
                                                                 620
     4
                5
                         1770
                                          2111
                                                                 450
                                                                             46620
     Store ID
                             a
     Store_Area
     Items_Available
                             0
     Daily_Customer_Count
                             0
     Store_Sales
     dtype: int64
             Store ID
                         Store_Area Items_Available Daily_Customer_Count \
                                                                896.000000
     count
           896.000000
                         896.000000
                                          896.000000
            448.500000
                        1485.409598
                                         1782.035714
                                                                 786.350446
     mean
            258.797218
                         250.237011
                                          299.872053
                                                                265.389281
     std
                         775.000000
                                          932.000000
              1.000000
                                                                 10.000000
     min
     25%
            224.750000
                        1316.750000
                                         1575.500000
                                                                 600.000000
     50%
            448.500000
                        1477.000000
                                         1773.500000
                                                                 780.000000
                                         1982.750000
     75%
            672.250000
                        1653.500000
                                                                970.000000
     max
            896.000000
                        2229.000000
                                         2667.000000
                                                                1560.000000
              Store_Sales
               896.000000
     count
     mean
             59351.305804
             17190.741895
     std
             14920.000000
     min
     25%
             46530.000000
     50%
             58605.000000
     75%
             71872.500000
     max
            116320.000000
```

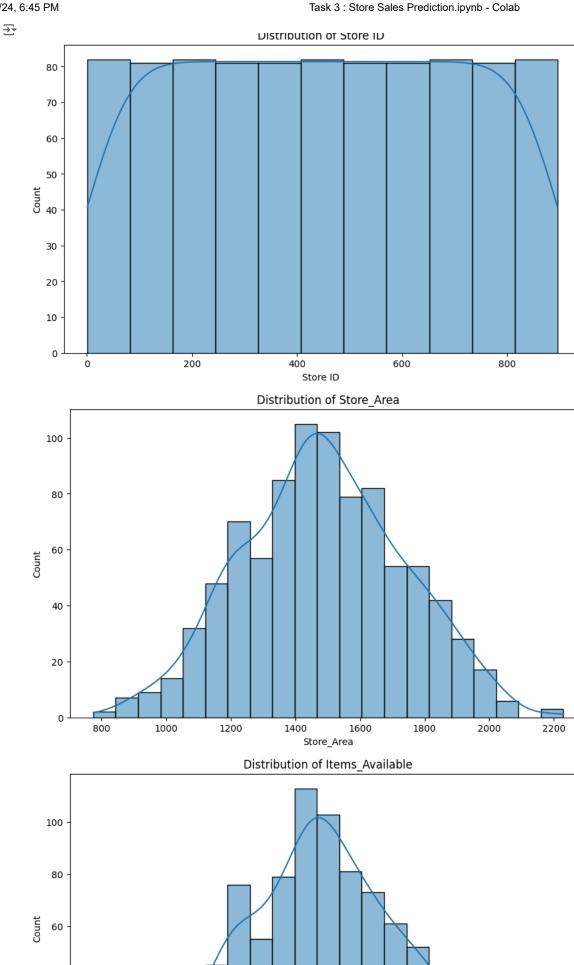
```
import matplotlib.pyplot as plt
import seaborn as sns

# Plotting distribution for numeric features
numeric_features = df.select_dtypes(include=['int64', 'float64']).columns

for feature in numeric_features:
    plt.figure(figsize=(10, 6))
    sns.histplot(df[feature], kde=True)
    plt.title(f'Distribution of {feature}')
    plt.show()

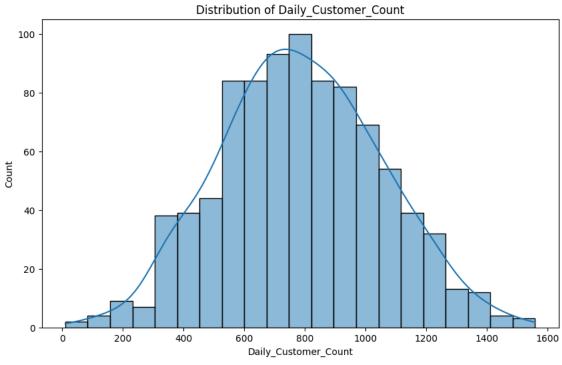
categorical_features = df.select_dtypes(include=['object']).columns

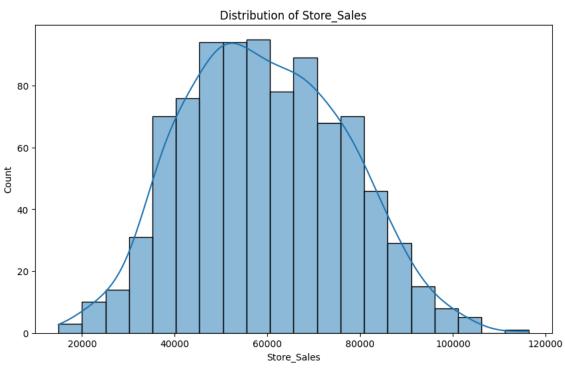
for feature in categorical_features:
    plt.figure(figsize=(10, 6))
    sns.countplot(x=df[feature])
    plt.title(f'Distribution of {feature}')
    plt.show()
```



40







```
# Correlation matrix for numeric features
plt.figure(figsize=(12, 8))
correlation_matrix = df[numeric_features].corr()
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm')
plt.title('Correlation Matrix')
plt.show()
# Pairplot to visualize relationships between numeric variables
sns.pairplot(df[numeric_features])
plt.show()
# Bivariate analysis for categorical vs numeric features
for cat_feature in categorical_features:
    for num_feature in numeric_features:
       plt.figure(figsize=(10, 6))
        sns.boxplot(x=df[cat_feature], y=df[num_feature])
        plt.title(f'{cat_feature} vs {num_feature}')
        plt.show()
```