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

```
df = pd.read_csv('/content/drive/MyDrive/Sample - Superstore.csv', encoding='latin1')
```

```
print(df.head())
print(df.info())
```

```
   Row ID        Order ID  Order Date   Ship Date       Ship Mode Customer ID  \
0       1  CA-2016-152156   11/8/2016  11/11/2016    Second Class    CG-12520
1       2  CA-2016-152156   11/8/2016  11/11/2016    Second Class    CG-12520
2       3  CA-2016-138688   6/12/2016   6/16/2016    Second Class    DV-13045
3       4  US-2015-108966  10/11/2015  10/18/2015  Standard Class    SO-20335
4       5  US-2015-108966  10/11/2015  10/18/2015  Standard Class    SO-20335

      Customer Name    Segment        Country             City  ...  \
0      Claire Gute   Consumer  United States        Henderson  ...
1      Claire Gute   Consumer  United States        Henderson  ...
2  Darrin Van Huff  Corporate  United States      Los Angeles  ...
3   Sean O'Donnell   Consumer  United States  Fort Lauderdale  ...
4   Sean O'Donnell   Consumer  United States  Fort Lauderdale  ...

  Postal Code  Region       Product ID         Category Sub-Category  \
0       42420   South  FUR-BO-10001798        Furniture    Bookcases
1       42420   South  FUR-CH-10000454        Furniture       Chairs
2       90036    West  OFF-LA-10000240  Office Supplies       Labels
3       33311   South  FUR-TA-10000577        Furniture       Tables
4       33311   South  OFF-ST-10000760  Office Supplies      Storage

                                        Product Name     Sales  Quantity  \
0                  Bush Somerset Collection Bookcase  261.9600         2
1  Hon Deluxe Fabric Upholstered Stacking Chairs,...  731.9400         3
2  Self-Adhesive Address Labels for Typewriters b...   14.6200         2
3      Bretford CR4500 Series Slim Rectangular Table  957.5775         5
4                    Eldon Fold 'N Roll Cart System   22.3680         2

   Discount    Profit
0      0.00   41.9136
1      0.00  219.5820
2      0.00    6.8714
3      0.45 -383.0310
4      0.20    2.5164

[5 rows x 21 columns]
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 9994 entries, 0 to 9993
Data columns (total 21 columns):
 #   Column         Non-Null Count  Dtype
---  ------         --------------  -----
 0   Row ID         9994 non-null   int64
 1   Order ID       9994 non-null   object
 2   Order Date     9994 non-null   object
 3   Ship Date      9994 non-null   object
 4   Ship Mode      9994 non-null   object
 5   Customer ID    9994 non-null   object
 6   Customer Name  9994 non-null   object
 7   Segment        9994 non-null   object
 8   Country        9994 non-null   object
 9   City           9994 non-null   object
 10  State          9994 non-null   object
 11  Postal Code    9994 non-null   int64
 12  Region         9994 non-null   object
 13  Product ID     9994 non-null   object
 14  Category       9994 non-null   object
 15  Sub-Category   9994 non-null   object
 16  Product Name   9994 non-null   object
```

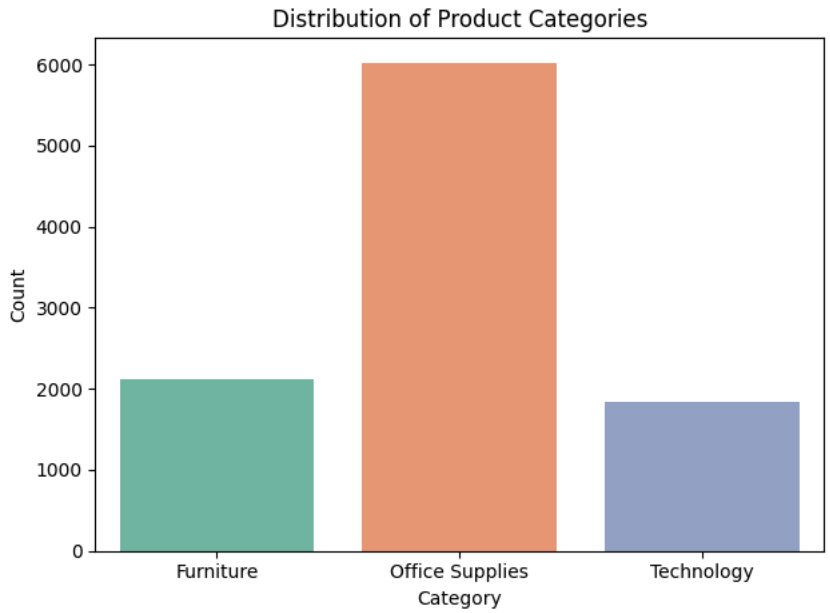
```
df.dropna(subset=['Sales', 'Profit', 'Category', 'Region', 'Ship Mode'], inplace=True)
```

```
sns.countplot(data=df, x='Category', palette='Set2')
plt.title('Distribution of Product Categories')
plt.xlabel('Category')
plt.ylabel('Count')
plt.tight_layout()
plt.show()
```

```
/tmp/ipython-input-7-1125743949.py:1: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `legend

  sns.countplot(data=df, x='Category', palette='Set2')
```

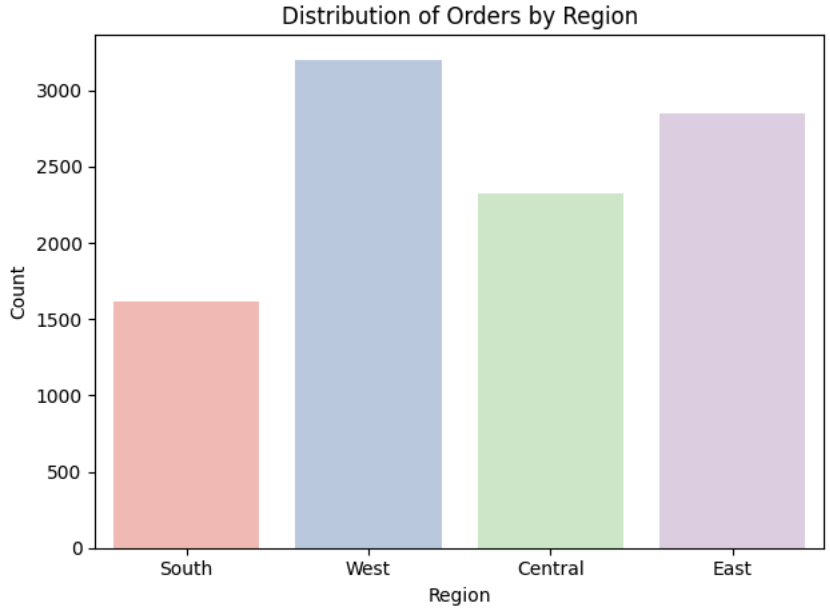



```
sns.countplot(data=df, x='Region', palette='Pastel1')
plt.title('Distribution of Orders by Region')
plt.xlabel('Region')
plt.ylabel('Count')
plt.tight_layout()
plt.show()
```

```
/tmp/ipython-input-8-4182484906.py:1: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `legend

  sns.countplot(data=df, x='Region', palette='Pastel1')
```

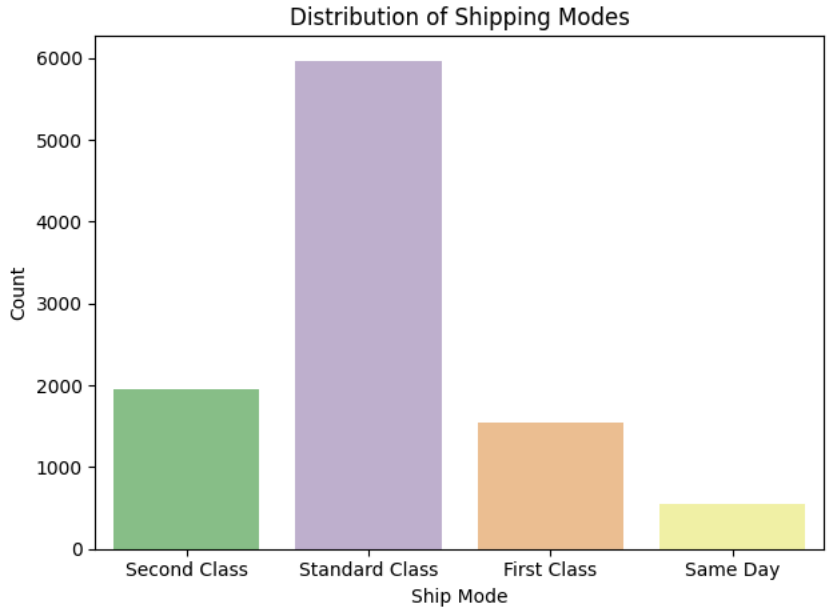


```
sns.countplot(data=df, x='Ship Mode', palette='Accent')
plt.title('Distribution of Shipping Modes')
plt.xlabel('Ship Mode')
plt.ylabel('Count')
plt.tight_layout()
plt.show()
```

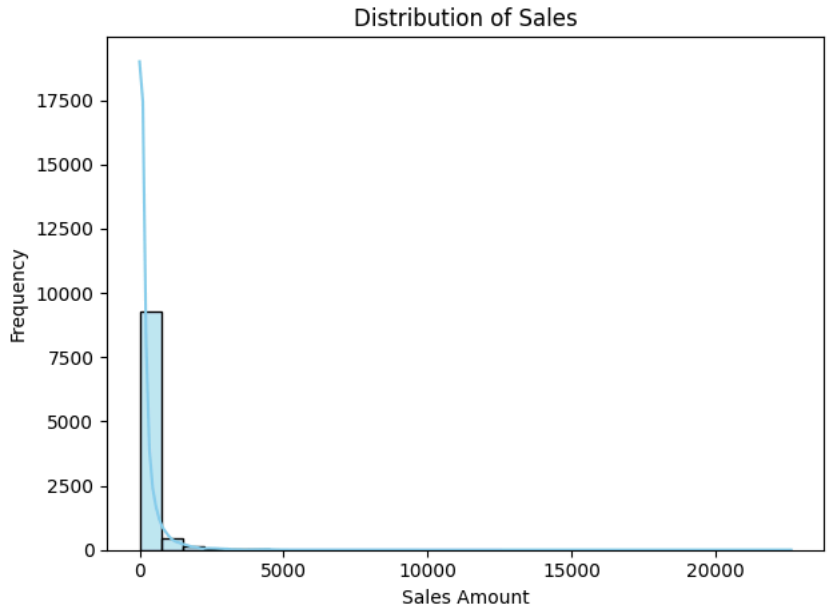
```
/tmp/ipython-input-9-3365989916.py:1: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable to `hue` and set `legend

  sns.countplot(data=df, x='Ship Mode', palette='Accent')
```

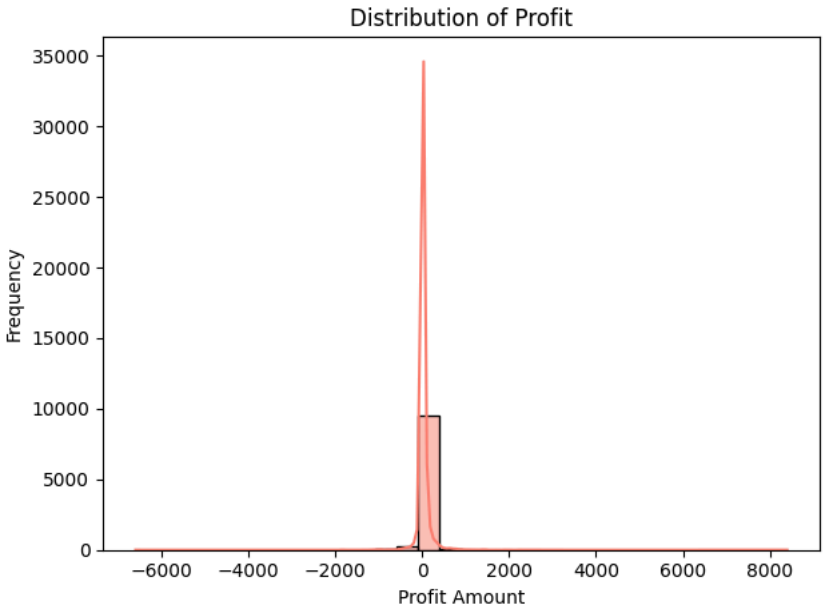



```
sns.histplot(df['Sales'], kde=True, bins=30, color='skyblue')
plt.title('Distribution of Sales')
plt.xlabel('Sales Amount')
plt.ylabel('Frequency')
plt.tight_layout()
plt.show()
```




```
sns.histplot(df['Profit'], kde=True, bins=30, color='salmon')
plt.title('Distribution of Profit')
plt.xlabel('Profit Amount')
plt.ylabel('Frequency')
plt.tight_layout()
```

```
plt.show()
```



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