

# TASK - 2

-BY

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- 1) Upload Superstore.csv document
- 2) I used jupyter and tableau both

1)

Jupyter

Code:-

```
import pandas as pd

encodings = ['latin1', 'ISO-8859-1', 'cp1252', 'utf-8']

for encoding in encodings:
    try:
        df = pd.read_csv("Desktop/Superstore.csv",
encoding=encoding)
        print(f"Success with encoding: {encoding}")
        break
    except UnicodeDecodeError:
        continue

df['Order Date'] = pd.to_datetime(df['Order Date'])
```

Month:-

```
# Extract month-year and aggregate sales
monthly_sales = df.groupby(df['Order Date'].dt.to_period('M'))
['Sales'].sum().reset_index()
monthly_sales['Order Date'] = monthly_sales['Order
Date'].astype(str)

plt.figure(figsize=(12, 5))
sns.lineplot(data=monthly_sales, x='Order Date', y='Sales',
color='#1f77b4')
plt.title("Monthly Sales Trend (Key Insight: Q4 Peak)",
fontweight='bold')
plt.xticks(rotation=45)
```

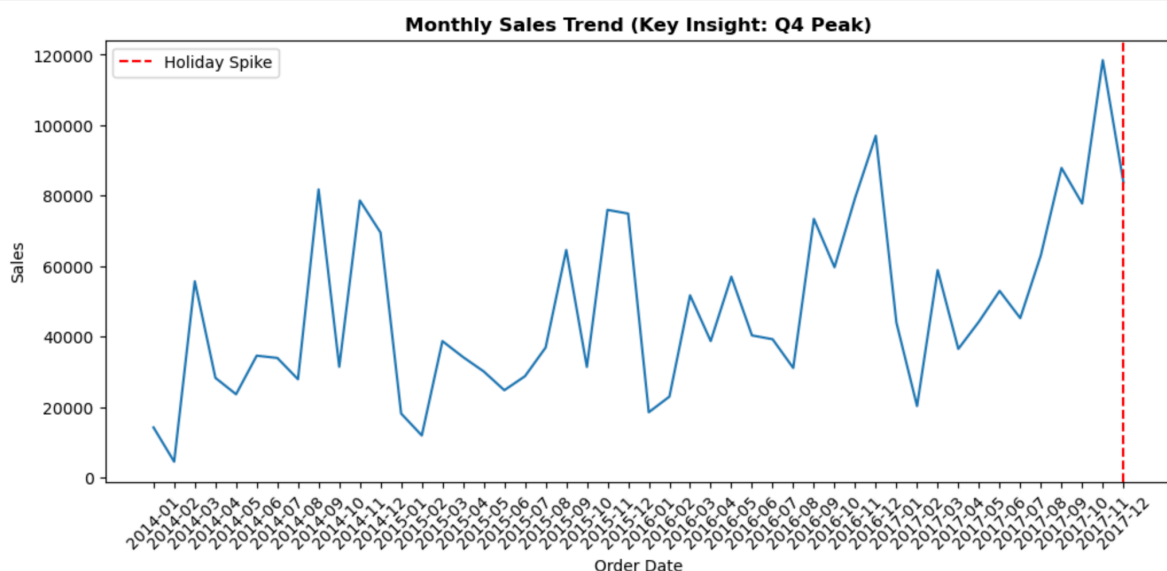
```
plt.axvline(x='2017-12', color='red', linestyle='--',
label='Holiday Spike') # Highlight Dec
plt.legend()
plt.show()
profit_by_subcat = df.groupby('Sub-Category')
['Profit'].sum().sort_values()

plt.figure(figsize=(10, 6))
bars = plt.barh(profit_by_subcat.index, profit_by_subcat.values,
color=['red' if x < 0 else 'green' for x in
profit_by_subcat.values])
plt.title("Profit by Sub-Category (Key Insight: Tables are Loss-
Making)", fontweight='bold')
plt.xlabel("Total Profit")
plt.grid(axis='x', linestyle='--')
plt.show()
```

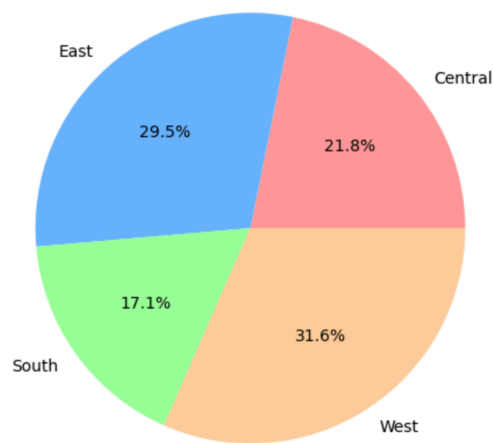
```
region_sales = df.groupby('Region')['Sales'].sum()

plt.figure(figsize=(6, 6))
plt.pie(region_sales, labels=region_sales.index, autopct='%1.1f%%',
colors=['#ff9999', '#66b3ff', '#99ff99', '#ffcc99'])
plt.title("Sales Distribution by Region (Key Insight: West
Dominates)", fontweight='bold')
plt.show()
```

```
segment_region = pd.crosstab(df['Region'], df['Segment'],
values=df['Sales'], aggfunc='sum')
segment_region.plot(kind='bar', stacked=True, figsize=(10, 6),
color=['#1f77b4', '#ff7f0e', '#2ca02c'])
plt.title("Sales by Region & Segment (Key Insight: Corporate Leads
in West)", fontweight='bold')
plt.ylabel("Total Sales")
plt.xticks(rotation=0)
```

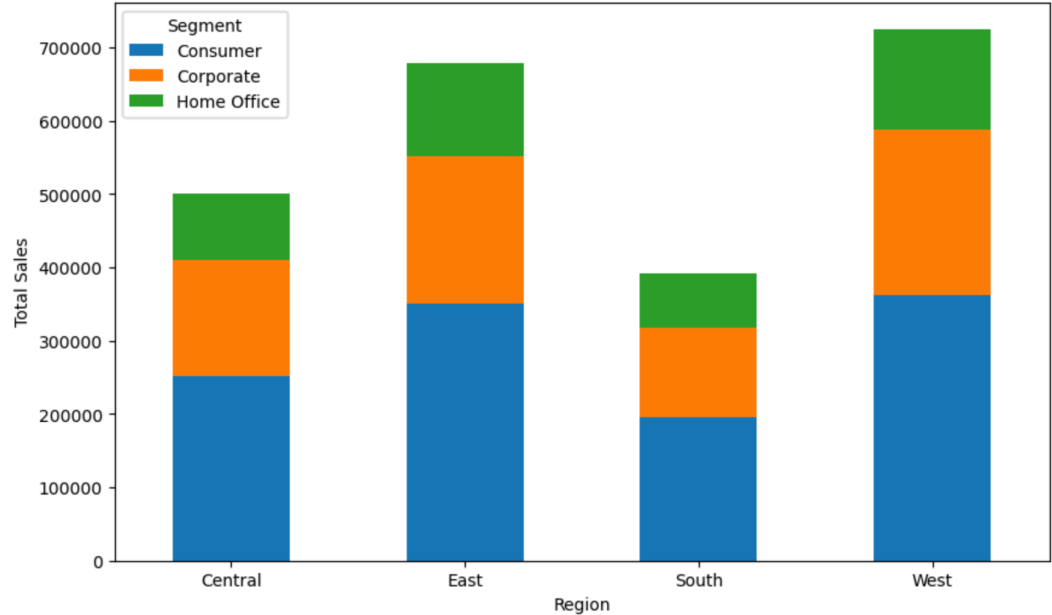


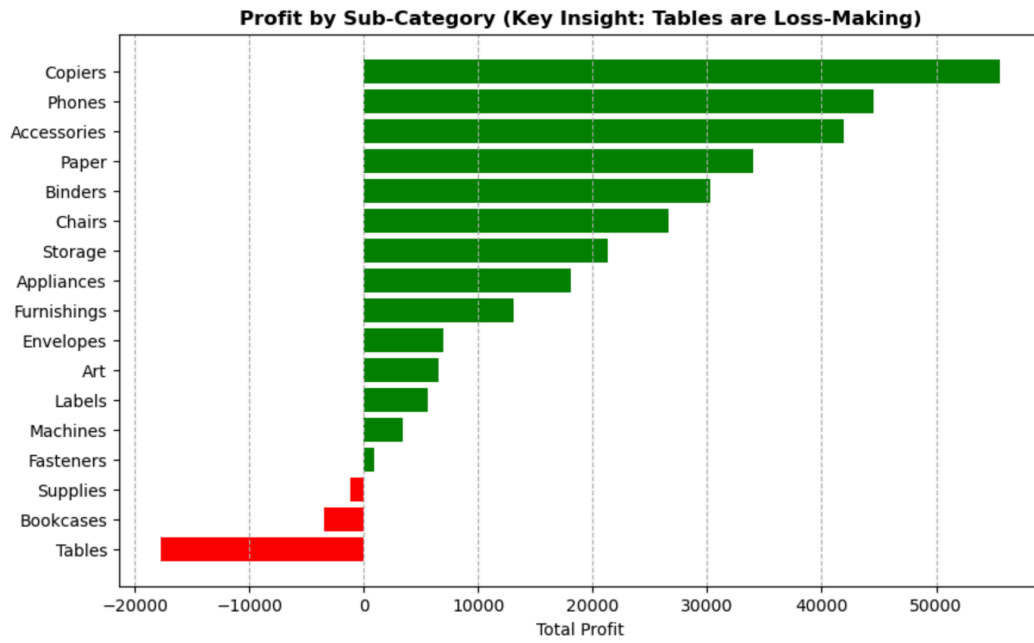
Sales Distribution by Region (Key Insight: West Dominates)



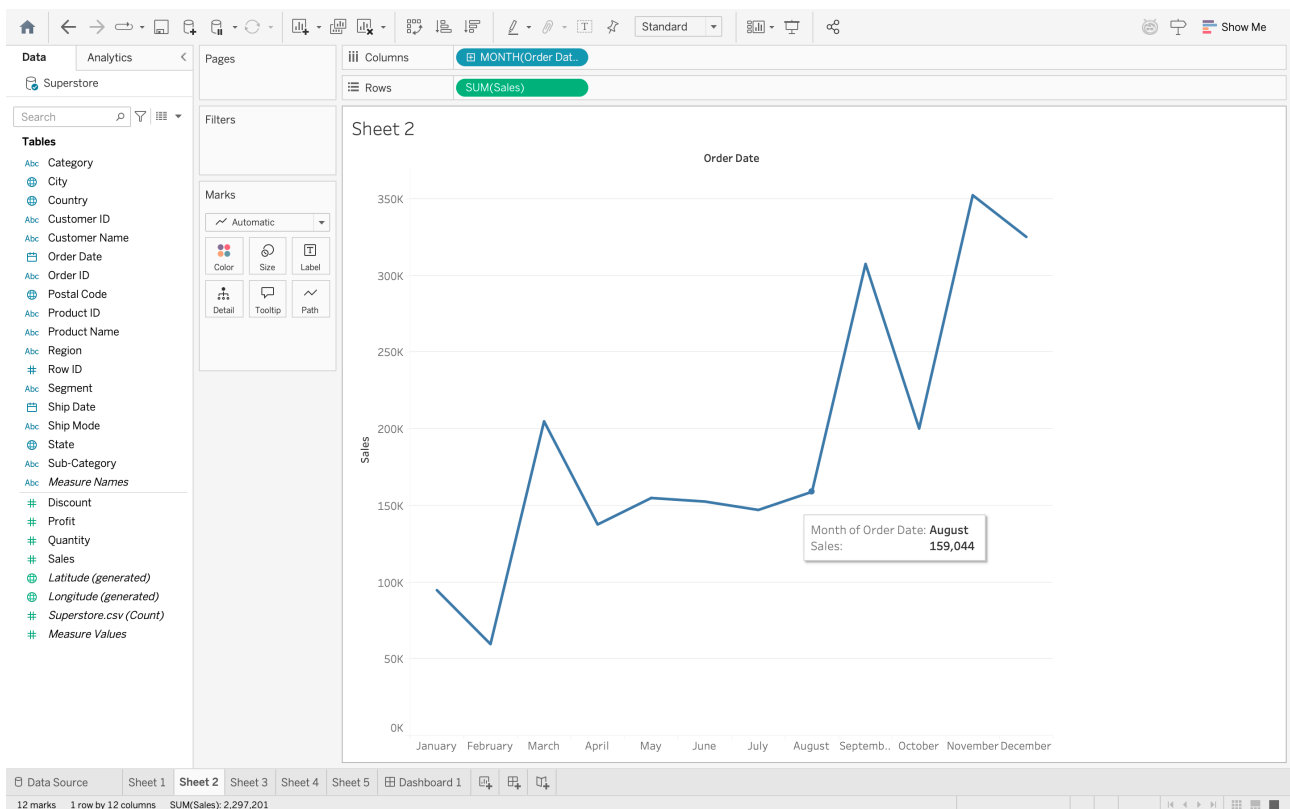
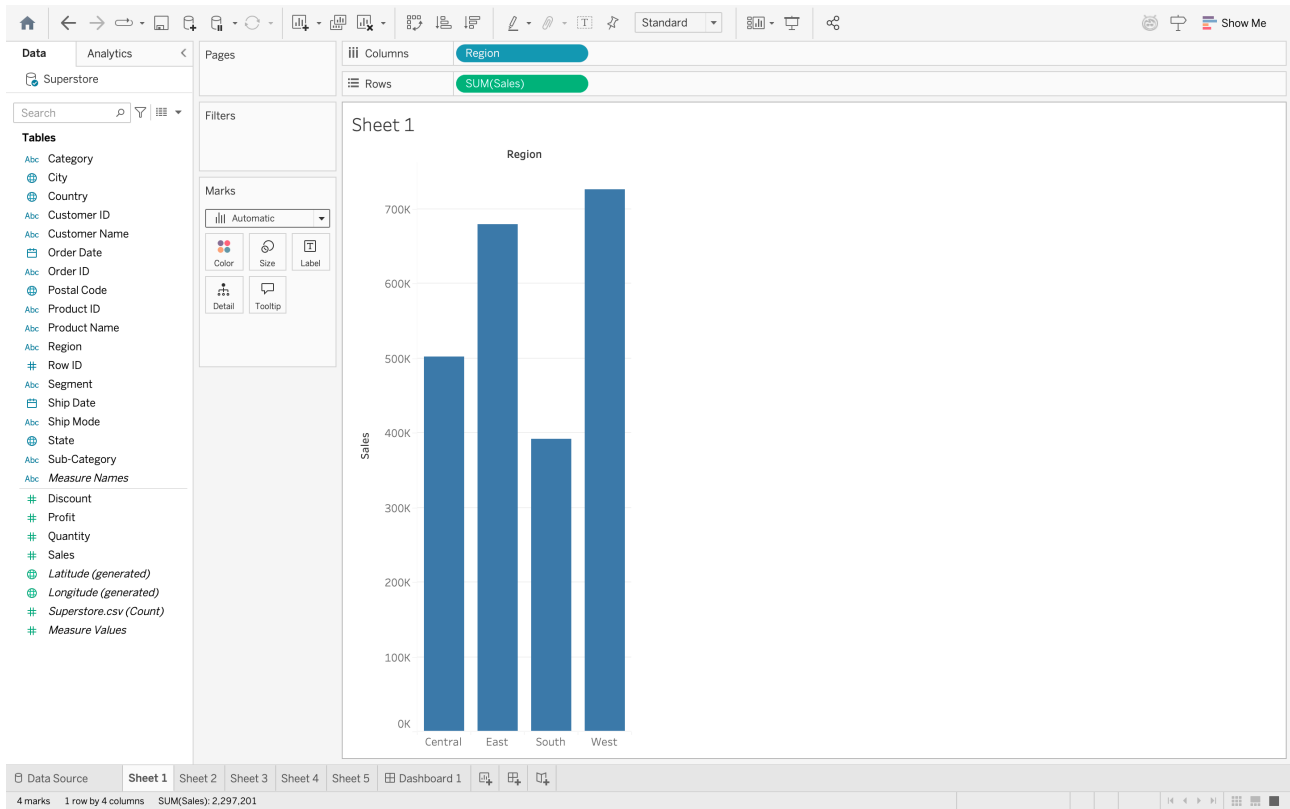
```
plt.show()
```

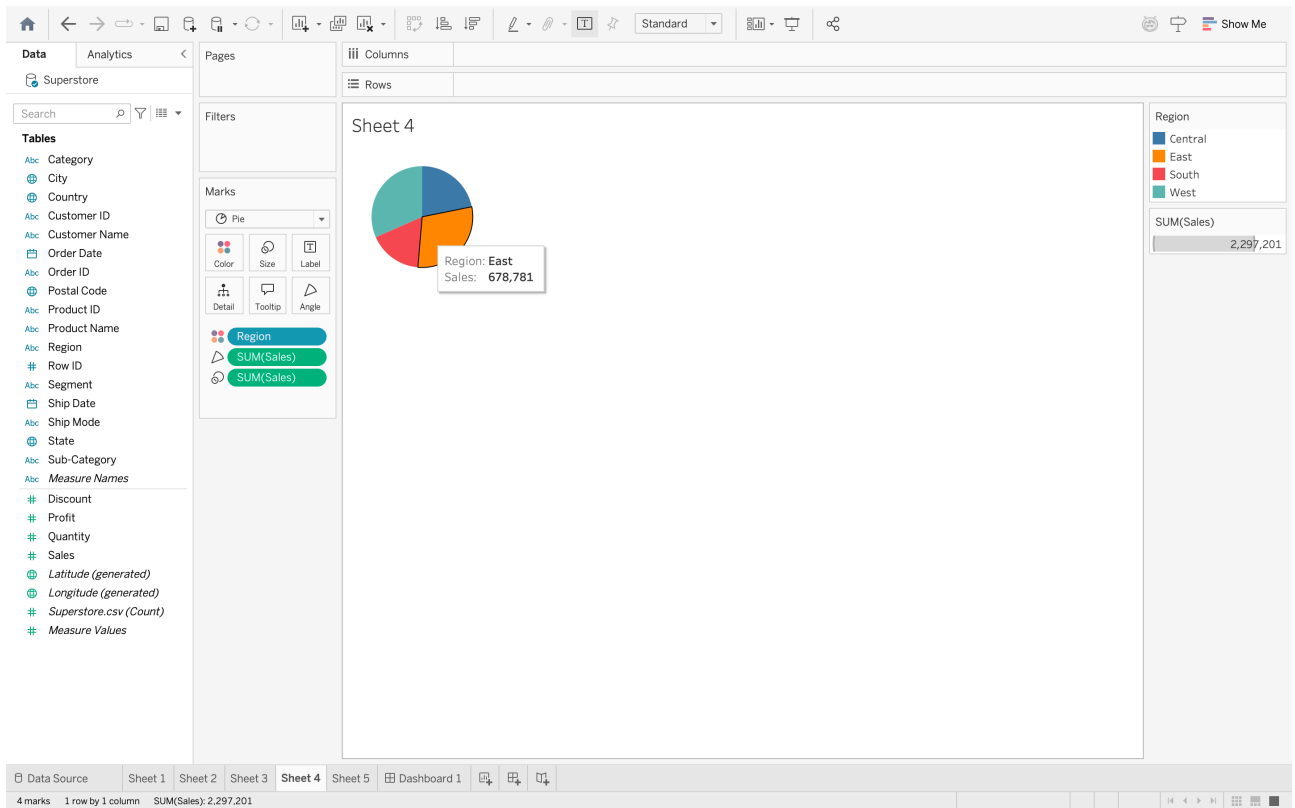
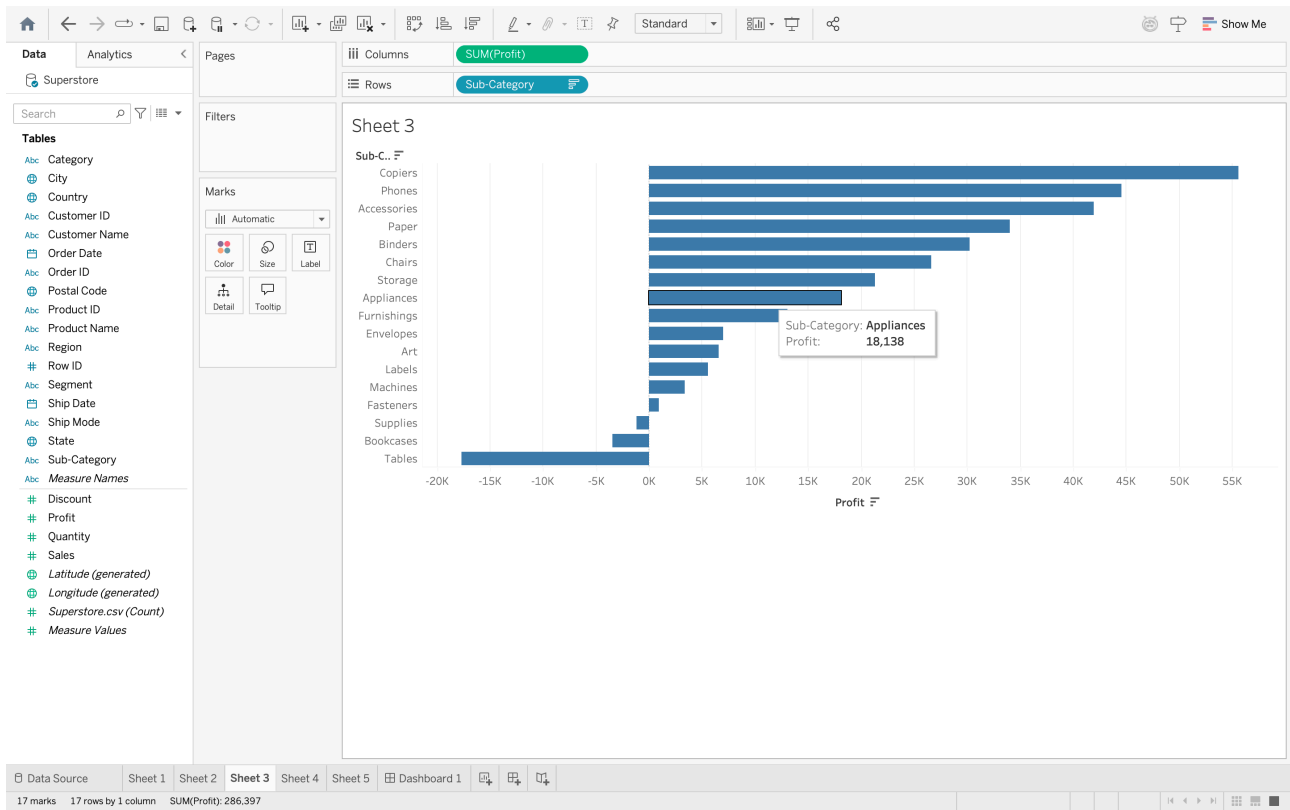
Sales by Region & Segment (Key Insight: Corporate Leads in West)

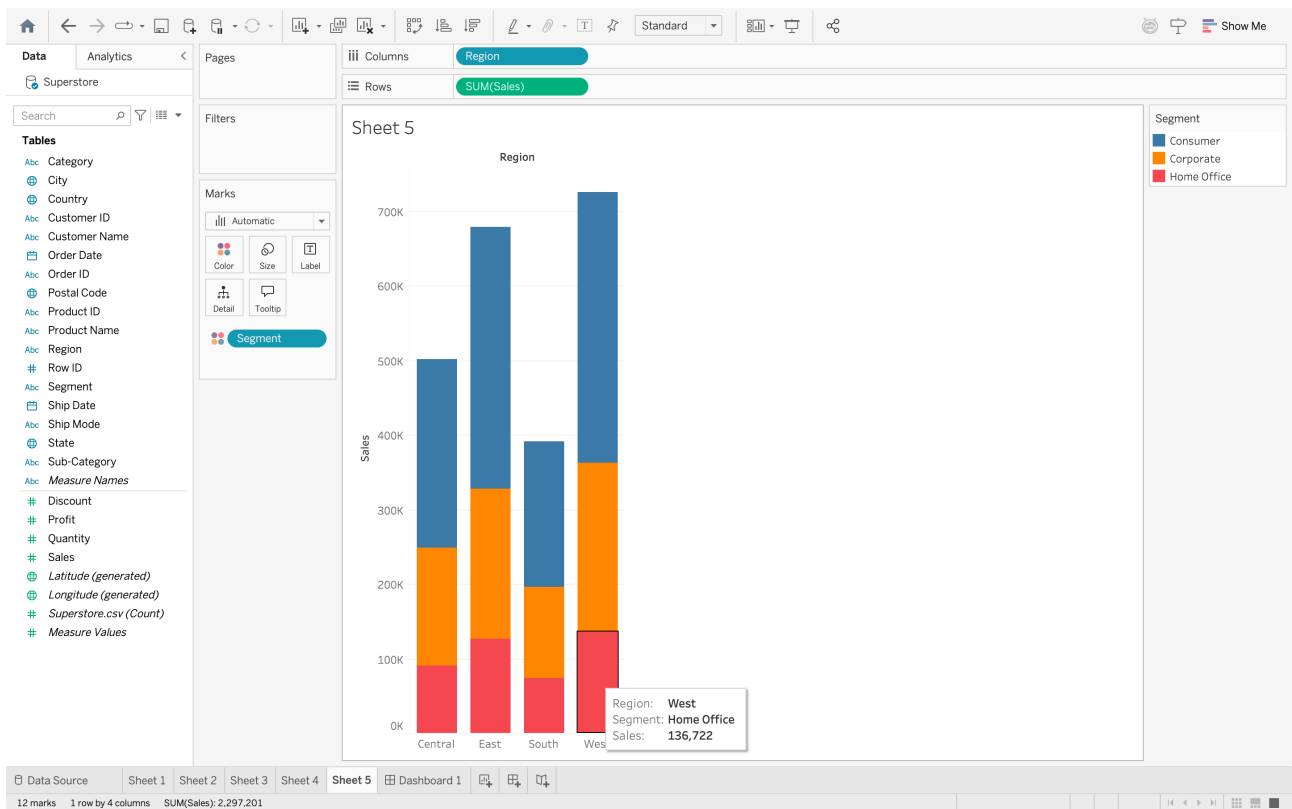




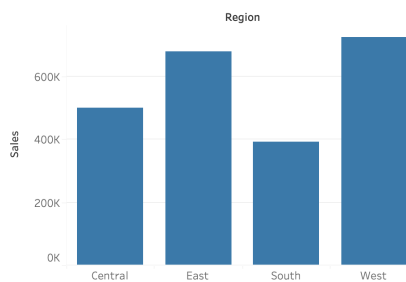
## 2)TABLEAU:-



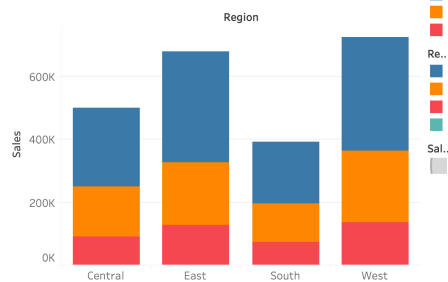




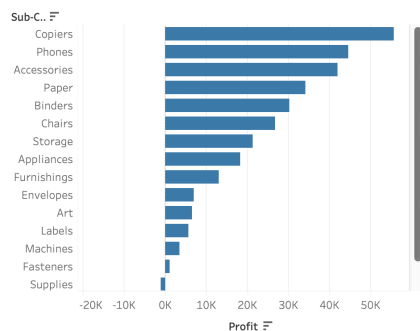
Sheet 1



Sheet 5



Sheet 3



Sheet 4



Sheet 2

