Date: 14.10.25

To Generate Visualisation Graphs for Given Dataset

Dataset:- Company Sales Branches comparision

Aim:- To Generate visualisation graphs for the company sales Branches comparision Dataset.

Program:-

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

df = pd.read_excel("/content/company-sales.xlsx")

sns.set(style ="whitegrit", palette ="viridis", font_scale
        =1.1)
```

Barchart:-

```
plt.figure(figsize =(10,5))
sns.barplot(x="Branch_name", y="Total_sales (₹)",
 data =df, hue= "Branch_Name", legend = False)
plt.title("Total Sales by Branch")
plt.xticks(rotation =45)
plt.tight_layout()
```

Task 10:- Use case

Date: 14.10.25

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Program:-

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# Barchart:-

plt.figure(figsize=(10,5))
sns.barplot(x="Branch_name", y="Total_sales (₹)",
data=df, hue="Branch_Name", legend=False)
plt.title("Total Sales by Branch")
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```

#coloumn chart:-

```
plt.figure(figsize=(10,5))
sns.barplot(x="Branch_Name", y="profit (%)",
data=df, color="skyblue")
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```

#piechart

```
region_sales = df.groupby("Region")["Total_sales (₹)"].
               sum()
plt.figure(figsize=(6,6))
plt.pie(region_sales, labels=region_sales.index,
        autopct="%.1.1f%%", startangle=90)
plt.title("sales distrubution by Region")
plt.show()
```

#scatter plot

```
plt.figure(figsize=(8,5))
sns.scatterplot(x="Total_sales (₹)", y="Profit (₹)",
hue="Region", s=100, data=df)
plt.title("profit vs Total Sales")
plt.tight_layout()
plt.show()
```

#Stacked Bar chart :-

```
region_group = df.groupby("Region")[["Total_sales(₹)",
                "Profit (%)"]].mean().reset_index()
region_group.plot(x="Region", kind="bar",
stacked = True, figsize=(8,5))
Plt.title("Average sales and profit by Region")
Plt.ylabel("value (₹/%)")
Plt.tight_layout()
Plt.show()
```

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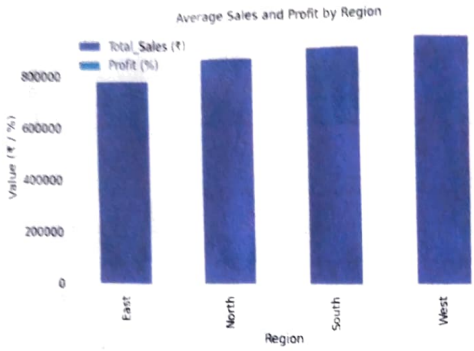
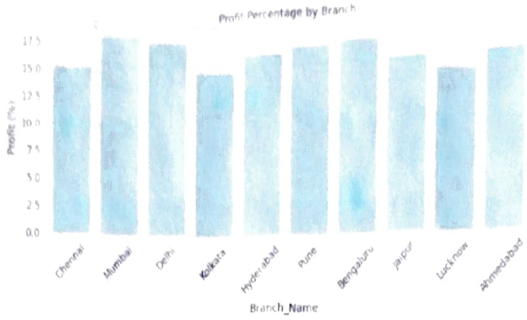
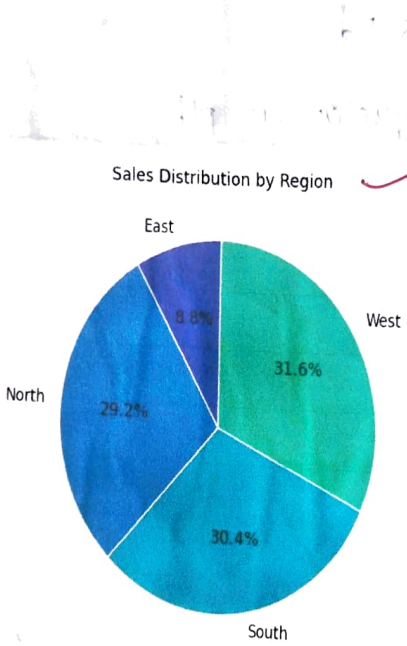
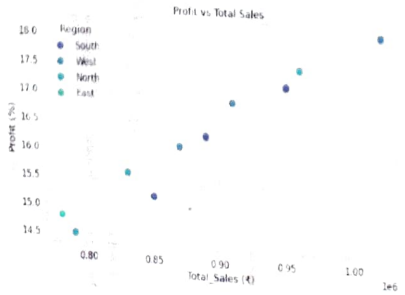
Result:-

The visualisation for given dataset has been successfully generated and deployed.


Average Sales and Profit by Region
Total_Sales (₹)
Profit (%)
800000
600000
400000
200000
0
Value (₹ / %)
East
North
South
West
Region


Profit Percentage by Branch
Profit (%)
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
Chennai
Mumbai
Delhi
Kolkata
Hyderabad
Pune
Bengaluru
Jaipur
Lucknow
Ahmedabad
Branch_Name


Sales Distribution by Region
East
8.8%
West
31.6%
North
29.2%
30.4%
South


Profit vs Total Sales
Region
South
West
North
East
Profit (%)
18.0
17.5
17.0
16.5
16.0
15.5
15.0
14.5
0.80
0.85
0.90
0.95
1.00
Total_Sales (₹)
1e6

Dataset :-

Branch_Name	Region	Total_sales (₹)	Profit (%)
Chennai	South	850000	15.2
Mumbai	West	1020000	18.1
Delhi	North	960000	17.5
Kolkata	East	780000	14.8
Hyderabad	South	890000	16.3
Pune	West	910000	16.9
Bengaluru	South	950000	17.2
Jaipur	North	830000	15.6
Lucknow	North	790000	14.5
Ahmedabad	West	870000	16.1