IBM SKILLSBUILD PROJECT

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COLLEGE STATE: DELHI

INTERNSHIP DOMAIN: DATA ANALYTICS

INTERNSHIP DATE: 12 JUNE - 24 JULY 2023

PROBLEM STATEMENT

We were given a data set containing information pertaining to the transactions and other details of an American super store which we had to analyze.

AGENDA

PROJECT OVERVIEW

Purpose

To analyze the data in the Super Store database to draw meaningful conclusions

Scope

Using Python and Excel to conduct the data analysis

Objectives

To Find:
1. Top Selling Product Types
2. Top Most Profitable Sales
3. Top Discounted Products
4. Top Sales & Profits
5. Sale & Discount Correlation

END USERS

Super Store Owner(s)

Potential Investors
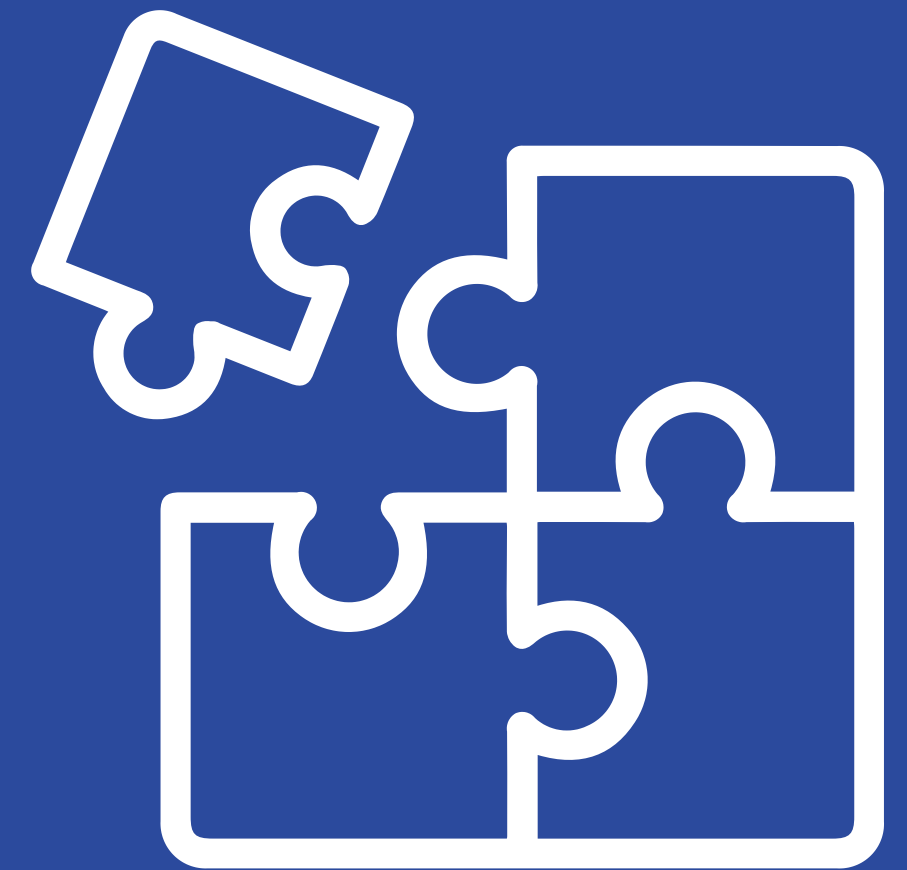
Marketing Team

Sales & Outreach Team

SOLUTION

By analyzing the data to draw conclusions out of sales and profits by region and the correlation between sales and the discounts given, the end users can gauge the long-term feasibility of the superstore and make their decisions accordingly.

CUSTOMIZATION

We chose to present the data visualization in standard bar charts as well as construct a scattergraph to show the correlation between sales and discounts which is something we believe to be somewhat unique.
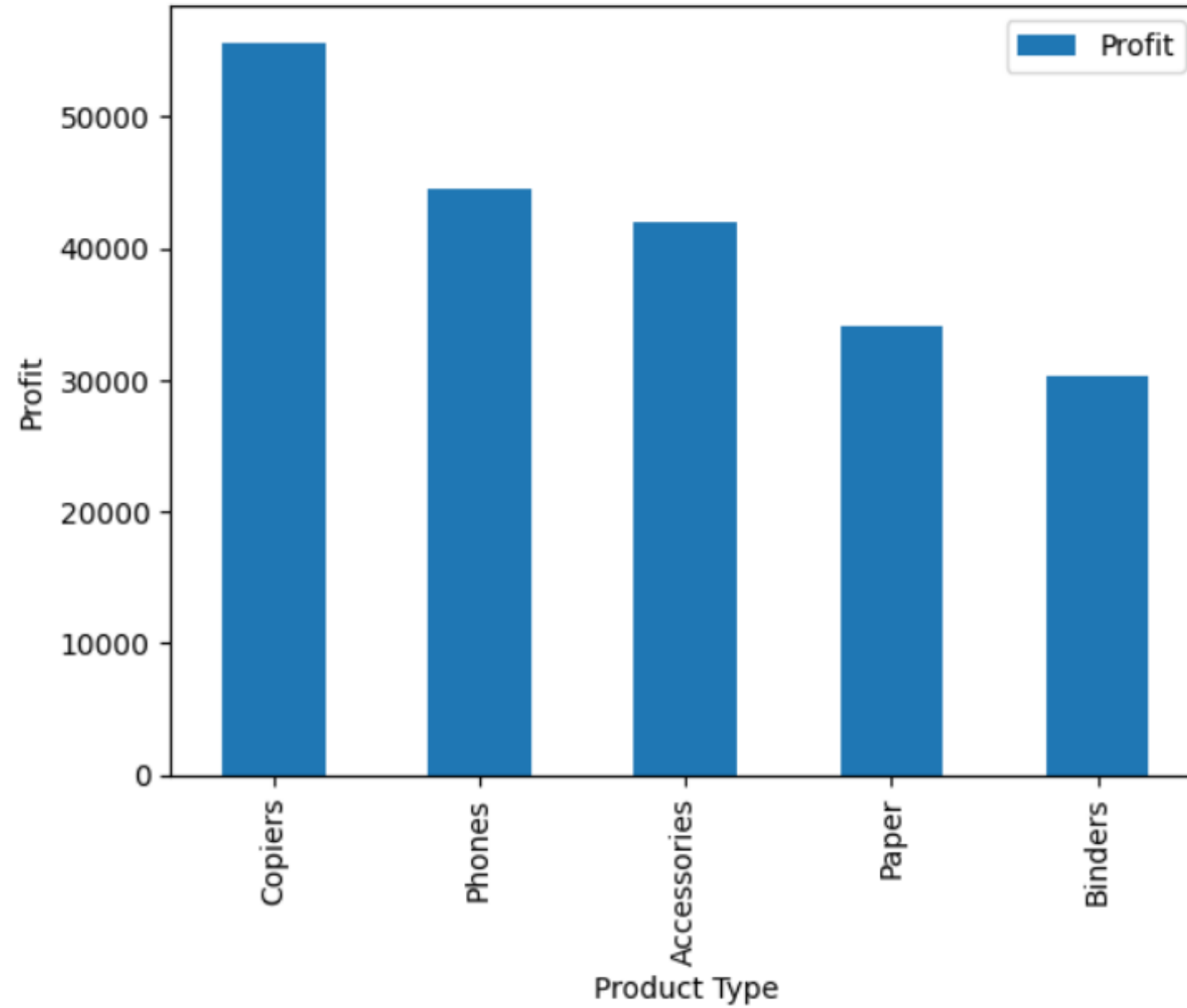
MODELING

Pattern recognition, Custom filtering, and data visualization through graphs and charts to showcase trends and highlight differences in datapoints depending on the area.
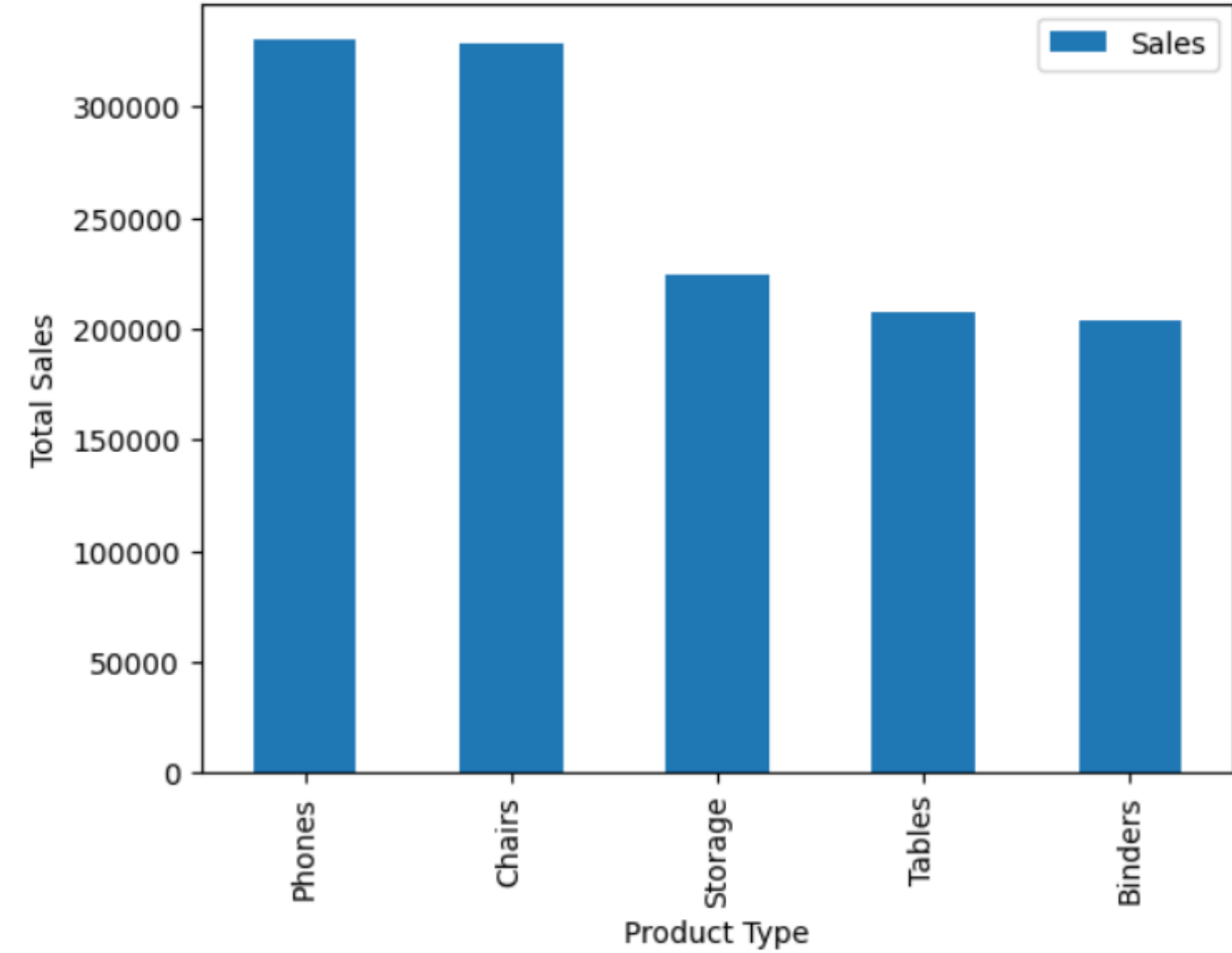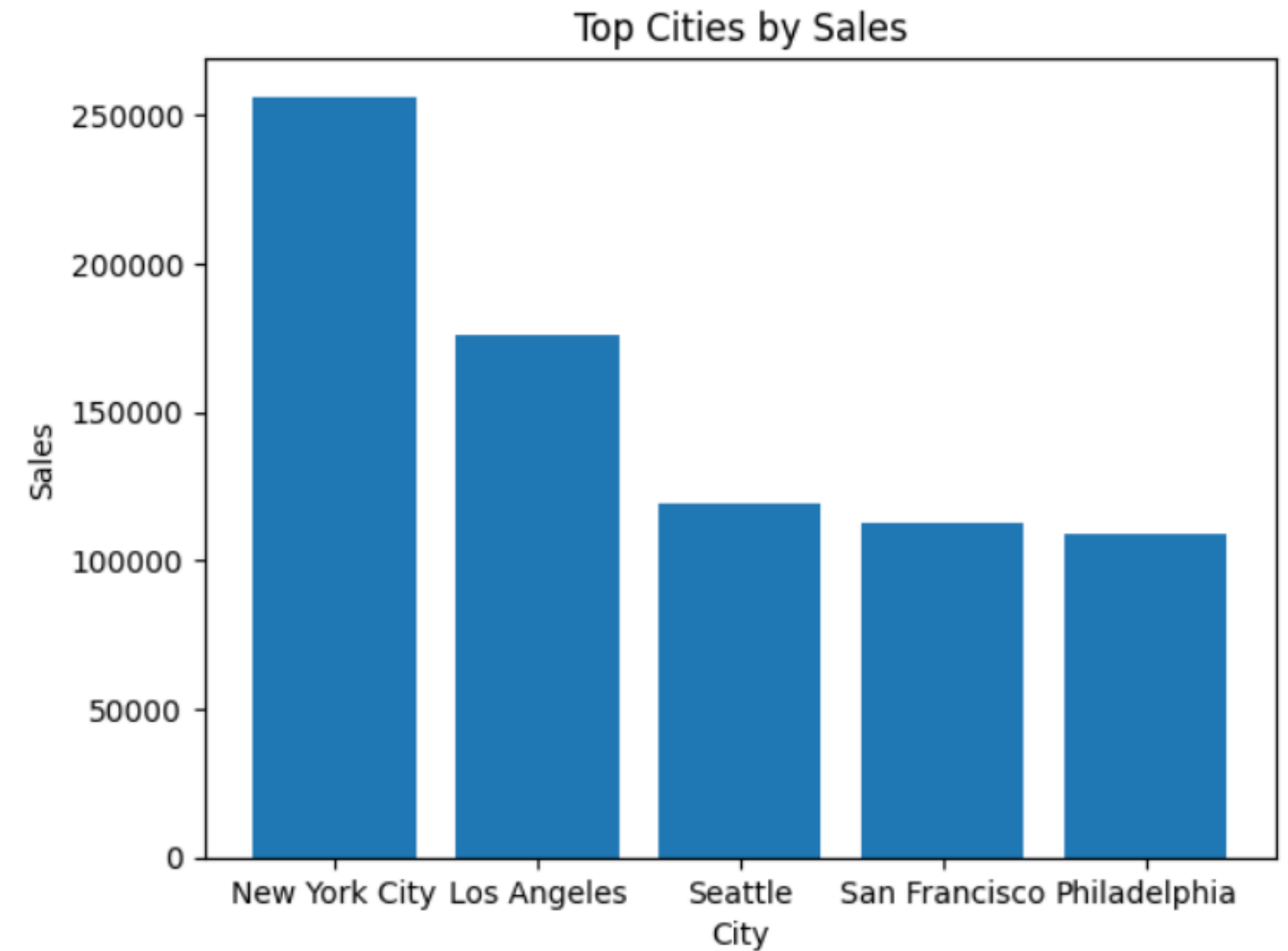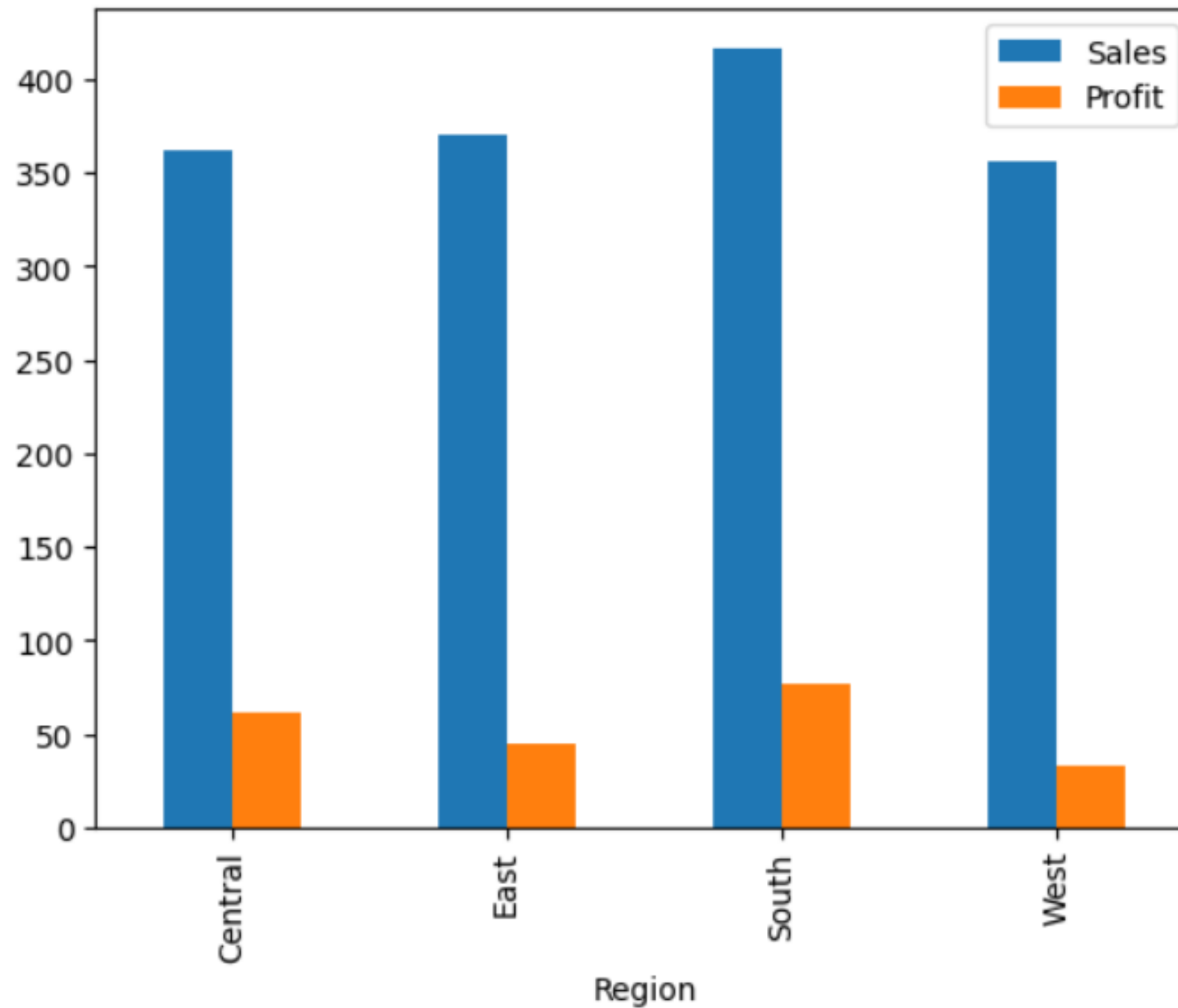
RESULTS – 1

Top 5 most profitting sales
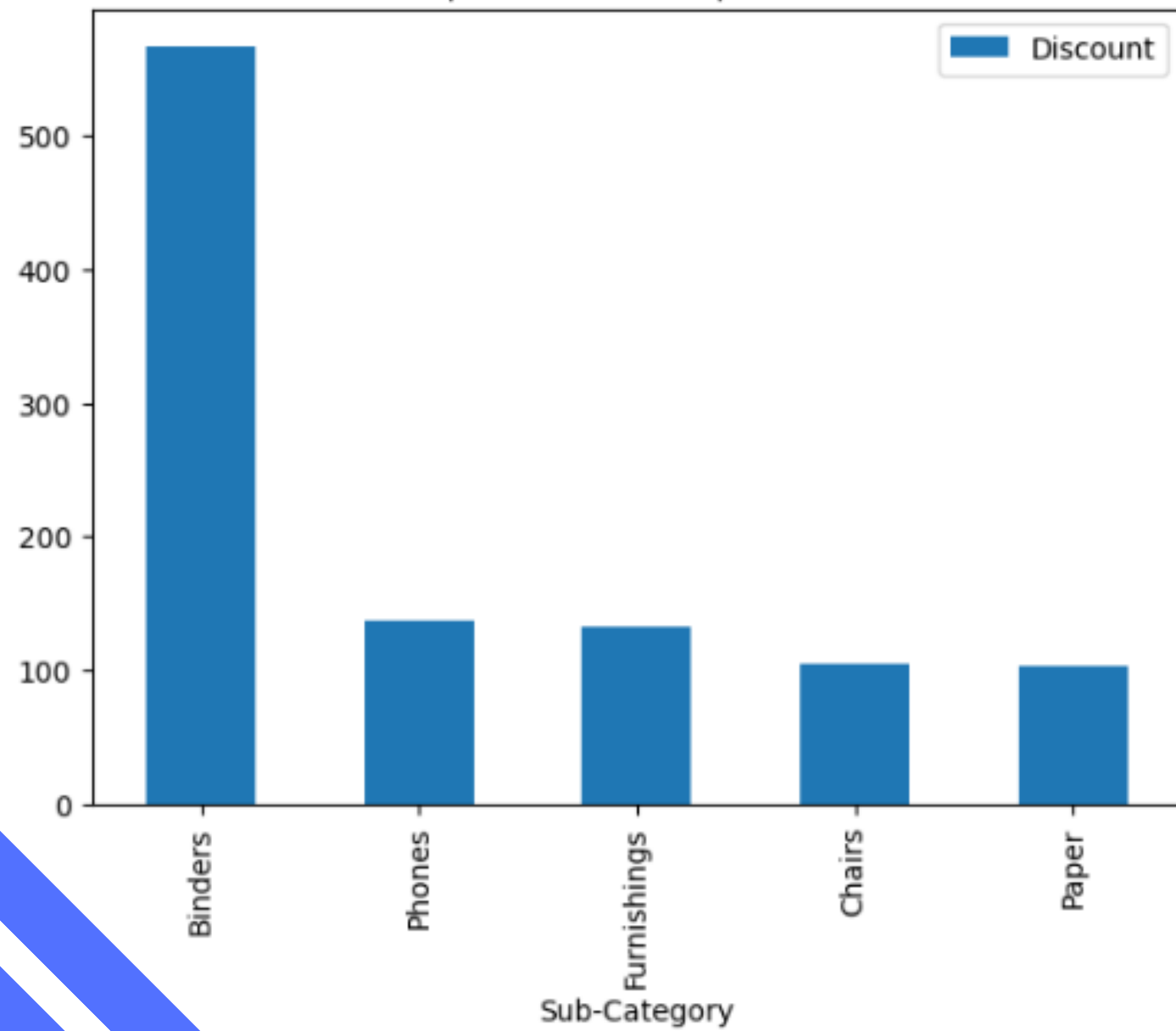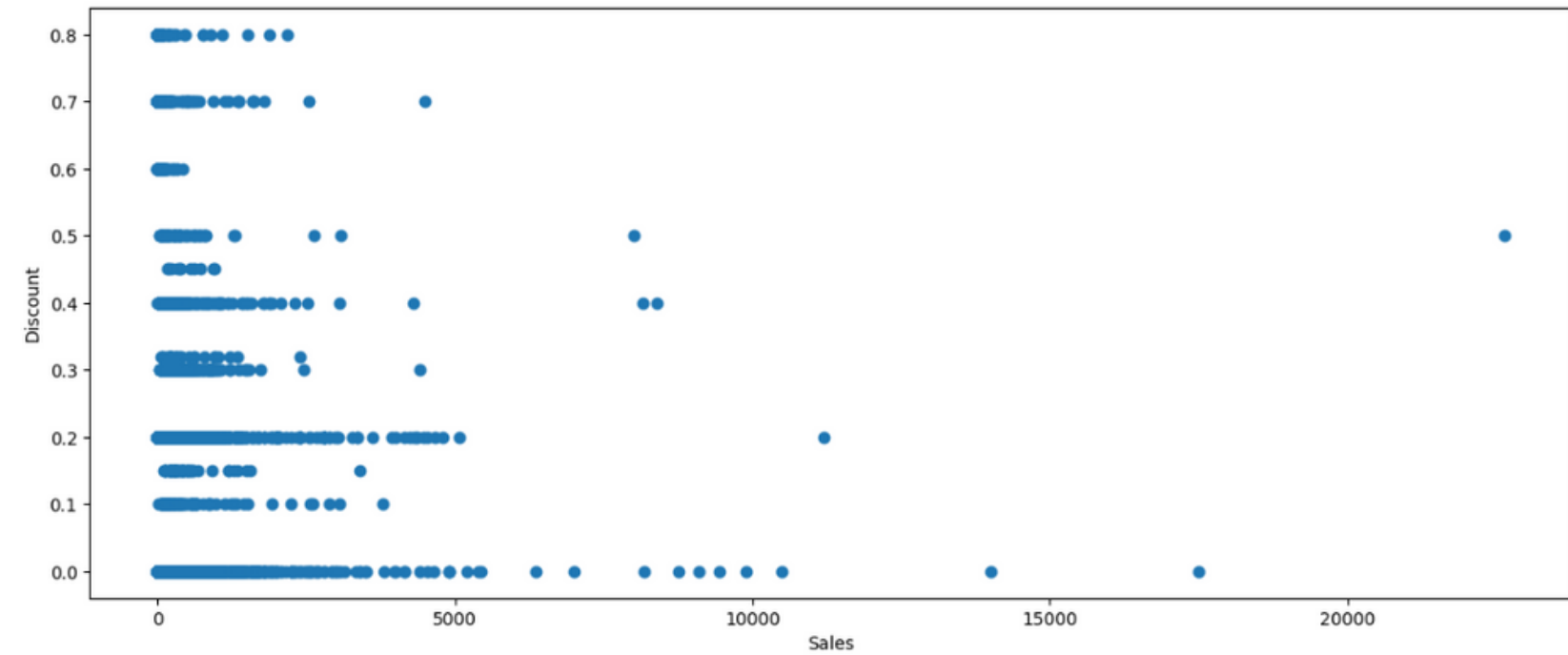
Top 5 Selling Product-type

RESULTS – 2

Top 5 Discounted products

```python
# Create a scatter plot between sales and discounts
plt.figure(figsize=(15,6))
plt.scatter(df['Sales'],df['Discount'])
plt.ylabel("Discount")
plt.xlabel("Sales")
plt.show()
```

```python
# Group the data by the discount and profit
plt.figure(figsize=(15,6))
plt.scatter(df['Profit'],df['Discount'])
plt.ylabel("Discount")
plt.xlabel("Profit")
plt.show()
```
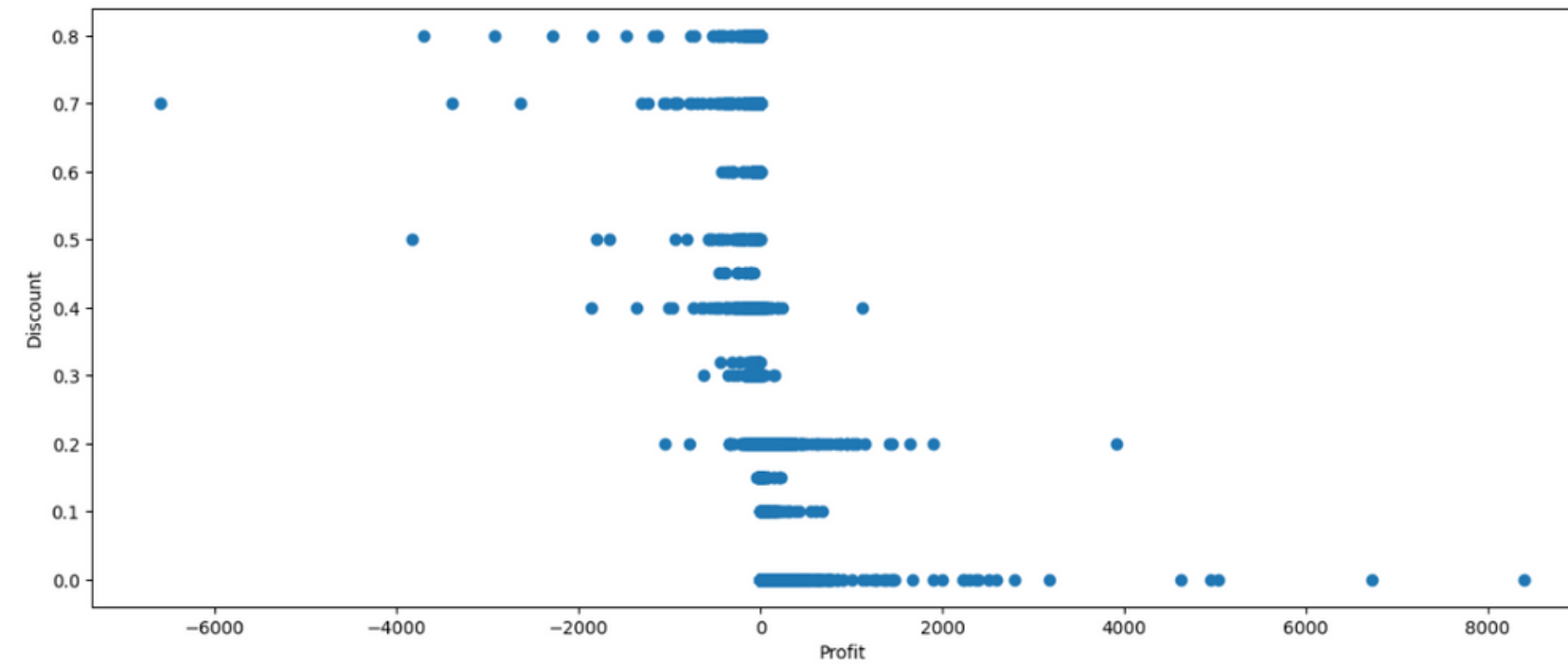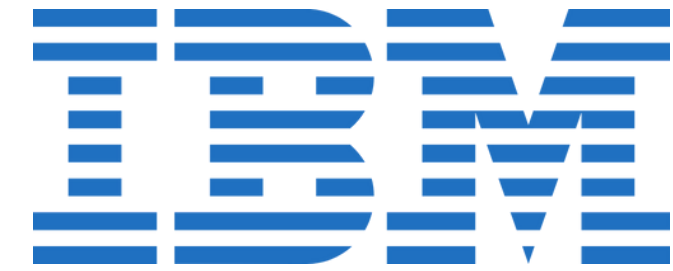
CONCLUSION

The primary contributing factor to the decline in sales is attributed to discounts. While certain areas experience losses due to excessive discounts, others witness reduced sales because of fewer promotional offers. As a result, it necessitates improvement in this area.

Enhancing sales during festival seasons can be achieved by offering higher discounts, leading to increased customer engagement and greater revenue.

In certain cities, sales are relatively low, possibly due to a lack of awareness. To address this, targeted advertising in those regions could potentially boost sales and raise brand visibility.
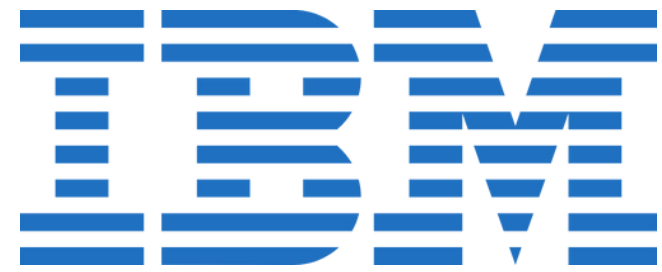
LINKS & REFERENCES

Github:

https://github.com/LDarlong/Edunet_IBM

Article Help:

https://medium.com/analytics-vidhya/exploratory-data-analysis-super-store-cb91c37bcb06

THANK YOU!

IBM

AICTE
All India Council for Technical Education
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edunet
foundation

Warm Regards,
Lalnundika Darlong