

**Mini Project  
Data Science**

# Data Visualization

with

Python & Looker Studio

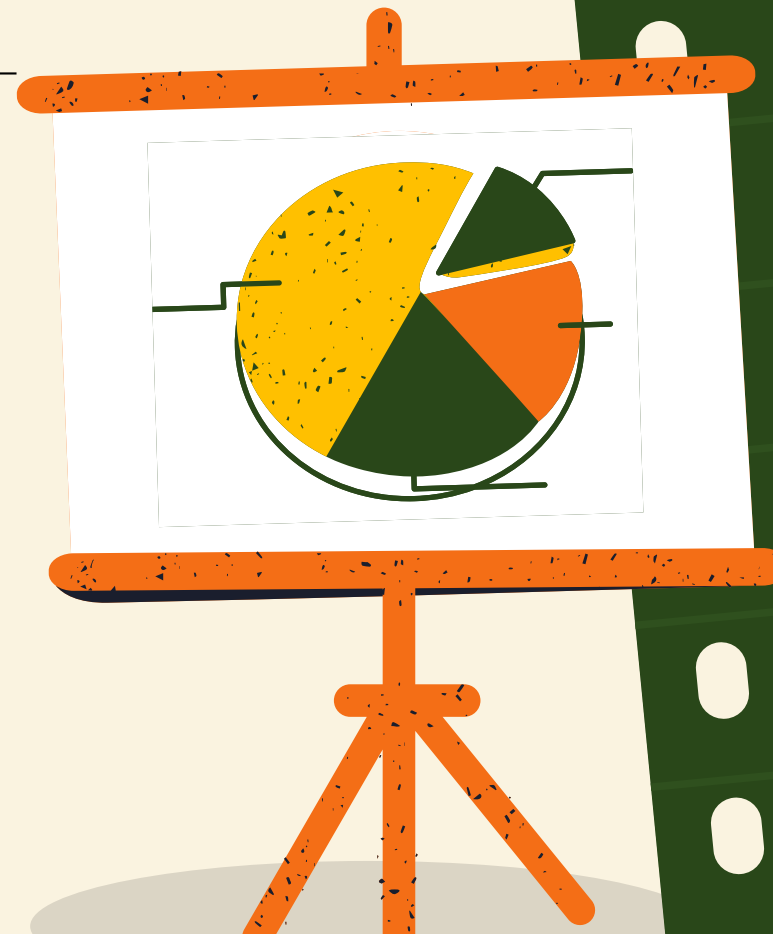


# What Dataset ?

In this mini project, we use an e-commerce dataset that contains transaction data from an e-commerce platform.

## Purpose

The purpose of data visualization for this dataset is to identify patterns, transaction trends, and facilitate data analysis to generate insights for business decision-making in the e-commerce sector.



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PART 1

# Dataset POV

To get a quick overview of the information from the dataset that will be used as the source for data visualization.



# Dataset Info

To view the information contained in the e-commerce dataset.

Product Category	Product	Sales	Quantity	Discount	...	Shipping Cost	Order Priority	Customer ID	Customer Name	Segment	City	State	Country	Region	Months
Auto & Accessories	Car Media Players	\$140.00	2	0.05	...	\$4.60	Medium	LS-001	Lane Daniels	Consumer	Brisbane	Queensland	Australia	Oceania	Nov
Auto & Accessories	Car Speakers	\$211.00	3	0.03	...	\$11.20	Medium	IZ-002	Alvarado Kriz	Home Office	Berlin	Berlin	Germany	Central	Jun
Auto & Accessories	Car Body Covers	\$117.00	5	0.01	...	\$3.10	Critical	EN-003	Moon Weien	Consumer	Porirua	Wellington	New Zealand	Oceania	Dec
Auto & Accessories	Car & Bike Care	\$118.00	2	0.05	...	\$2.60	High	AN-004	Sanchez Bergman	Corporate	Kabul	Kabul	Afghanistan	Central Asia	May
Auto & Accessories	Tyre	\$250.00	1	0.04	...	\$16.00	Critical	ON-005	Rowe Jackson	Corporate	Townsville	Queensland	Australia	Oceania	Jul

PART 2

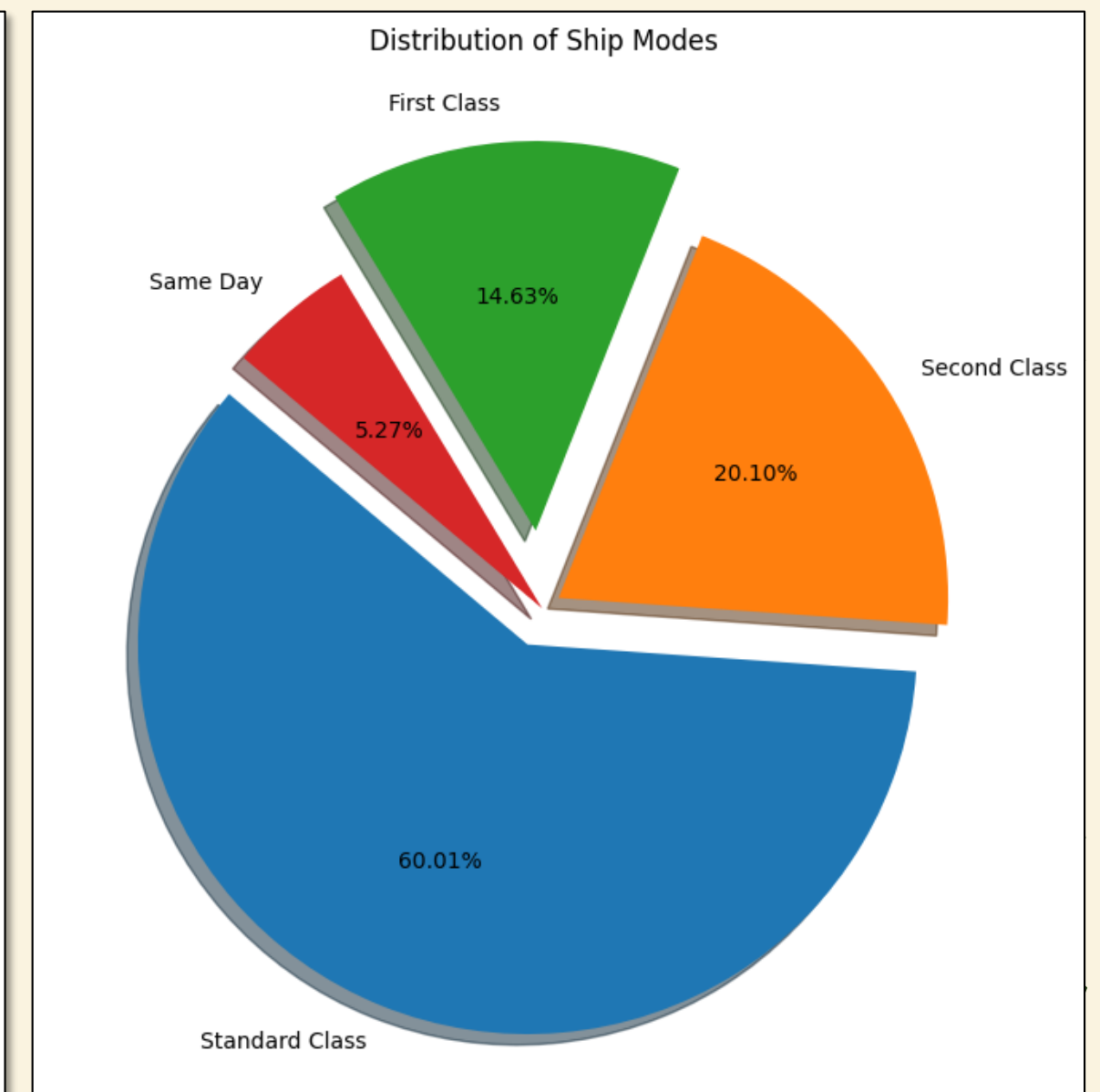
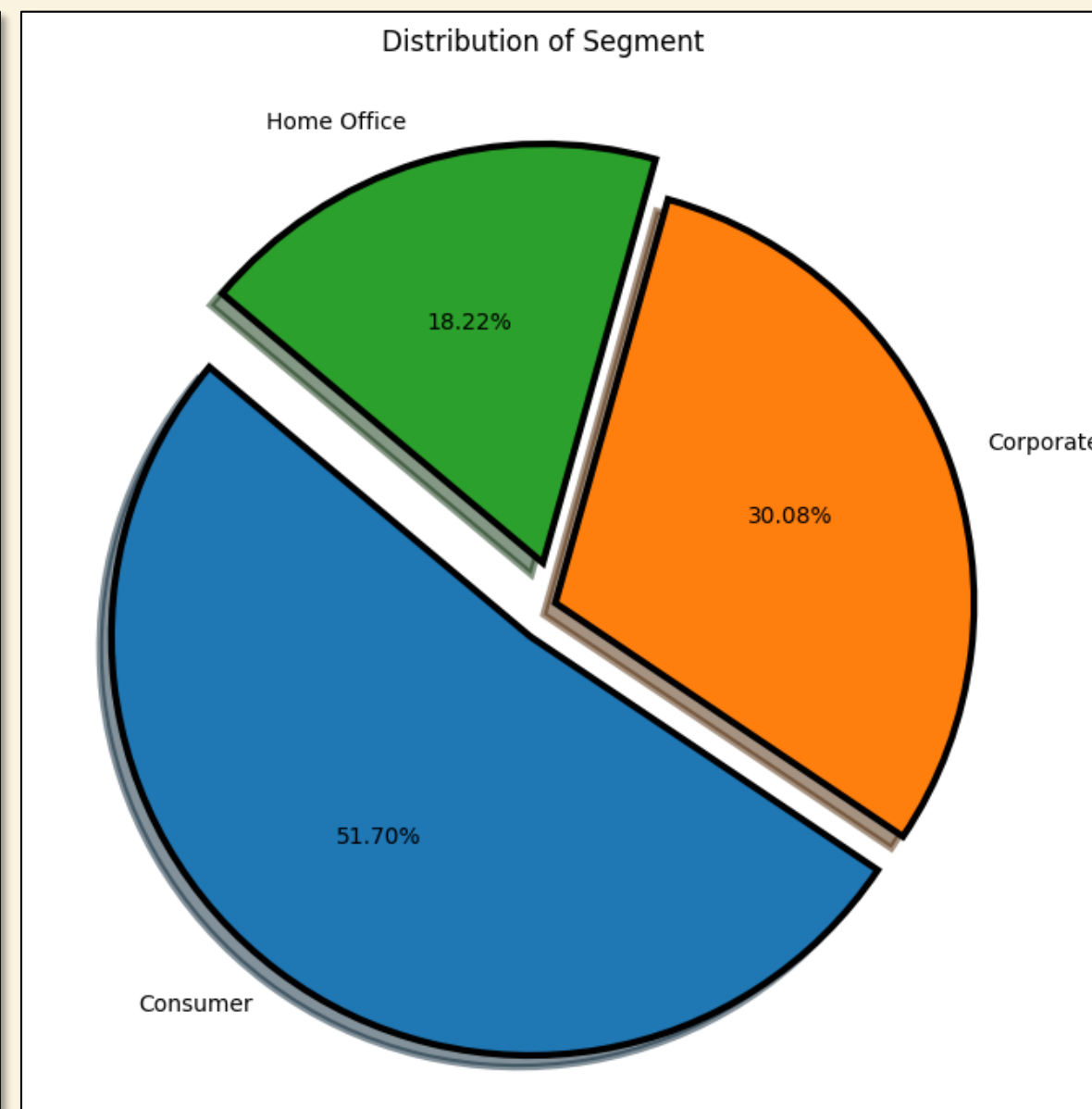
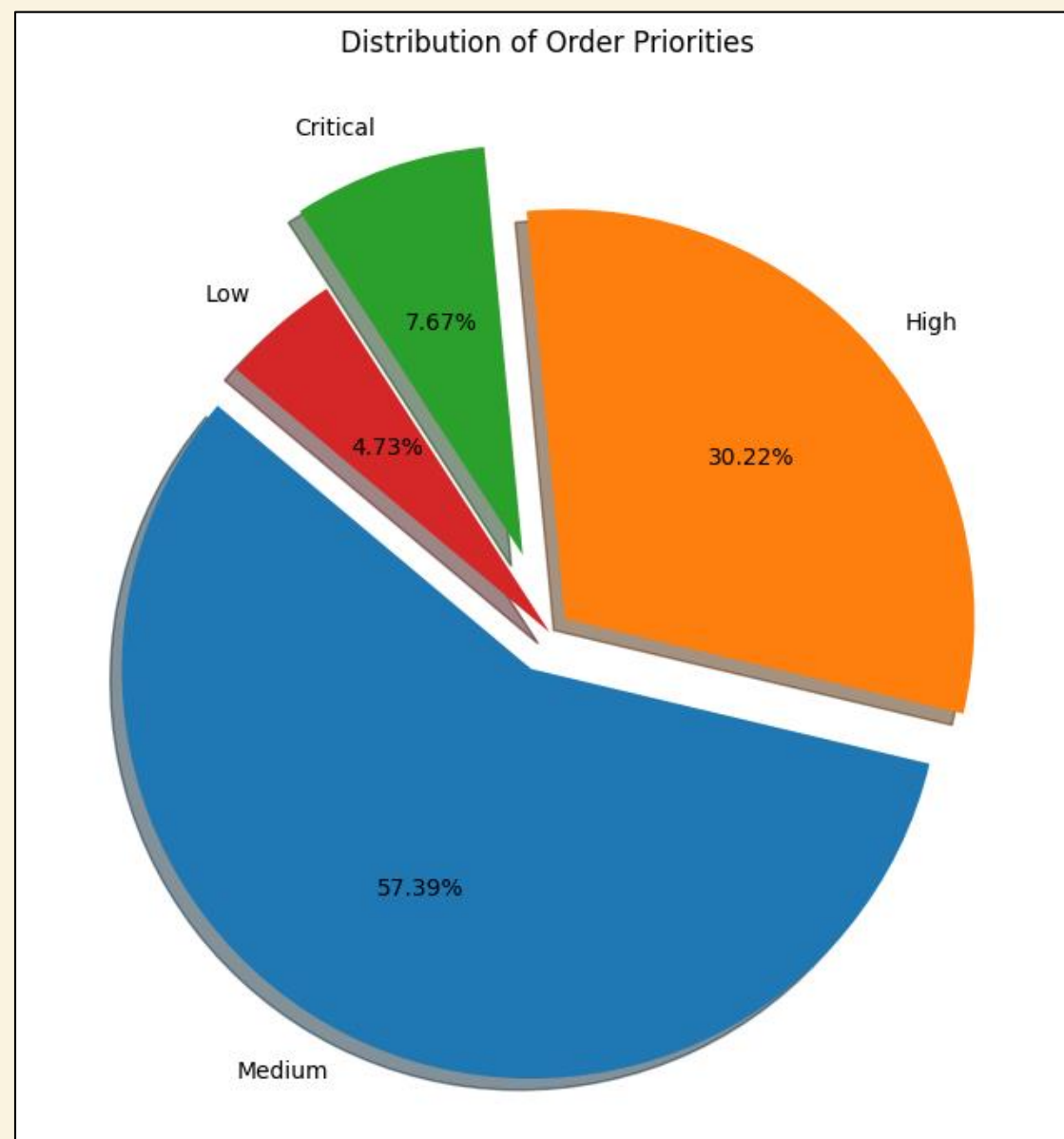
# Pie Chart

To view the data distribution in each column



# Data Distribution by Priority Column Using Pie Charts

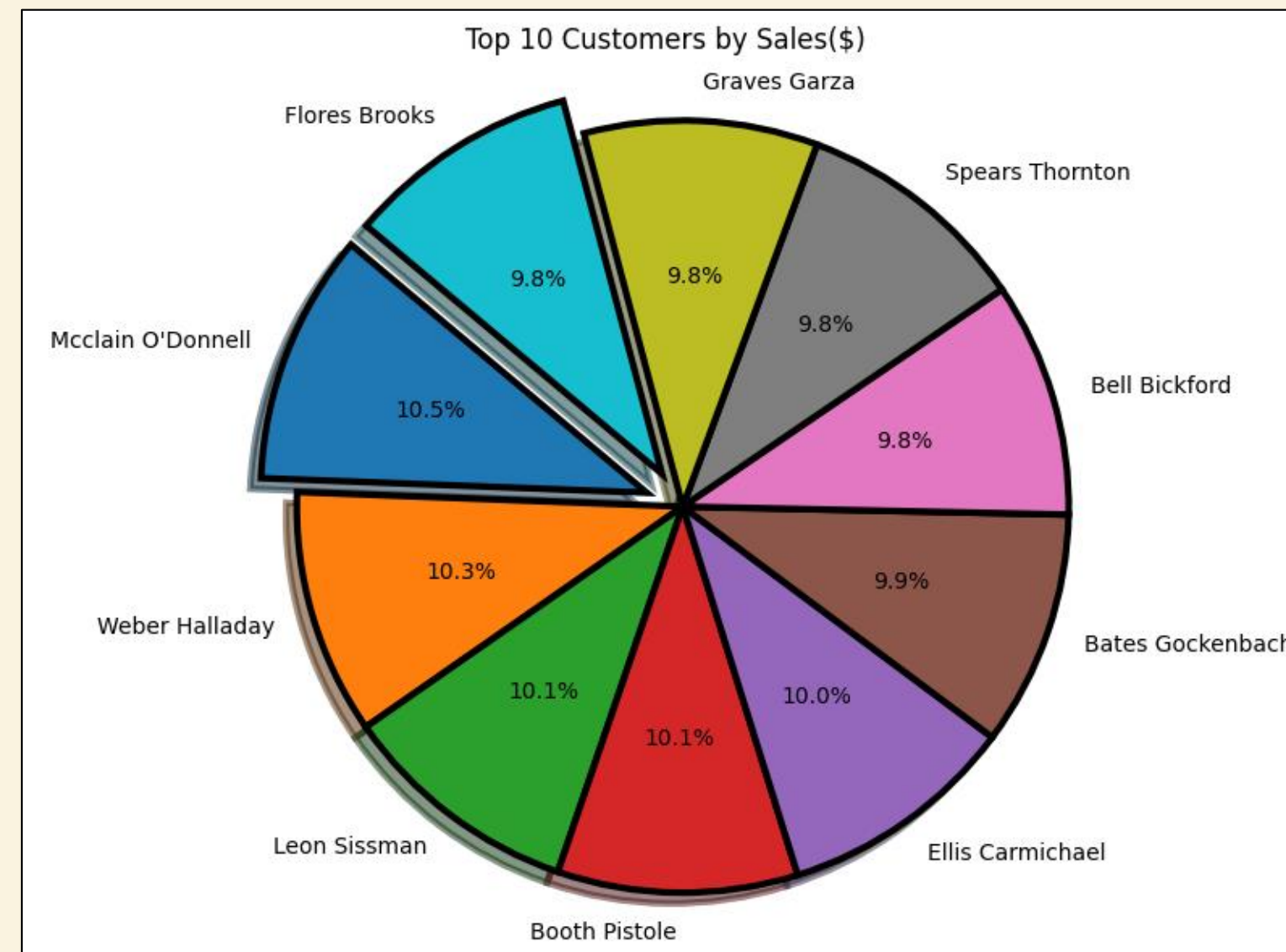
The percentage of data distribution in the columns to gain insights from the dataset information.





# Data Distribution by Priority Column Using a Pie Chart

Reviewing the top 10 customers with the highest sales values.



PART 3

# Time Series Chart

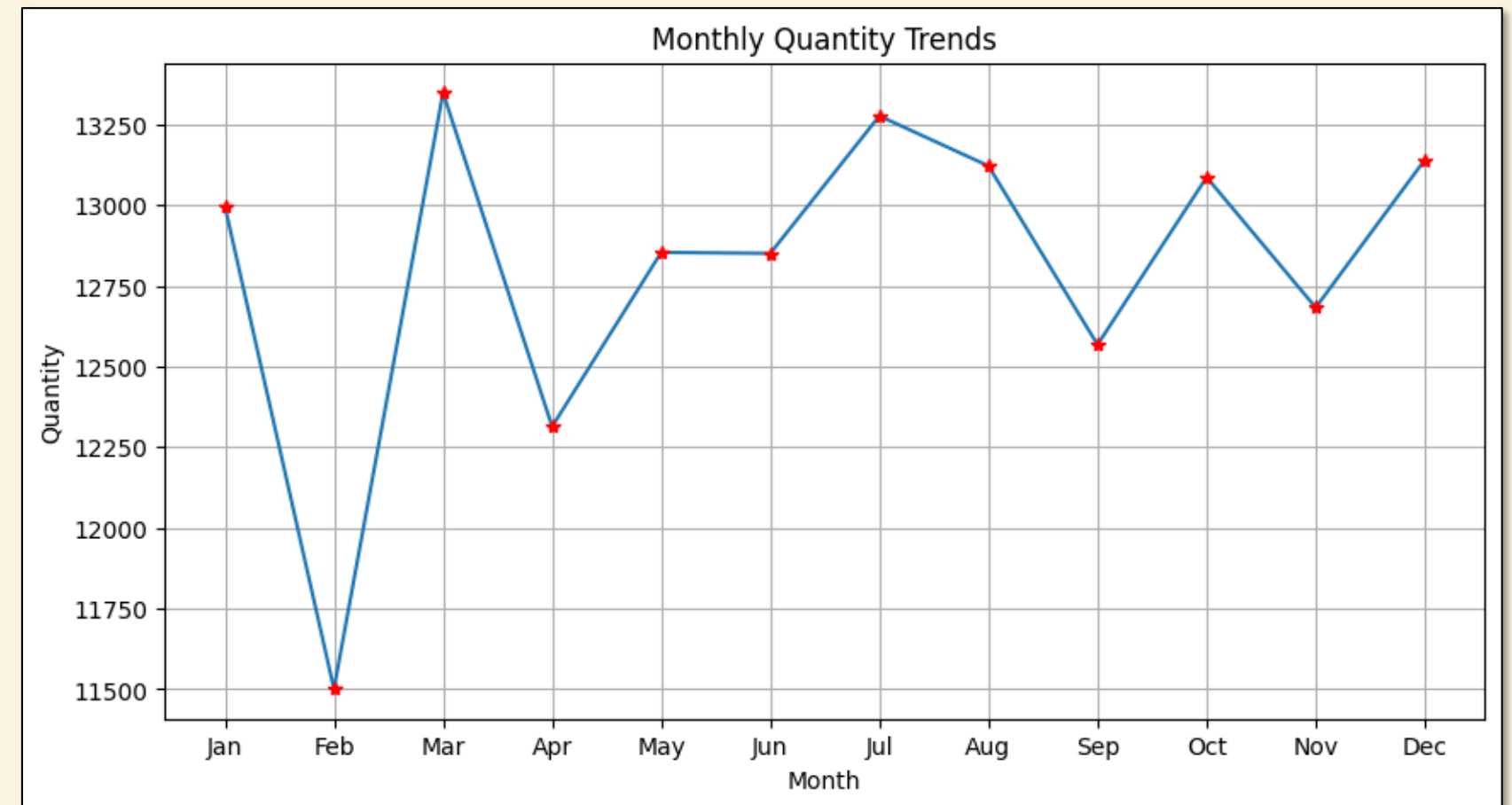
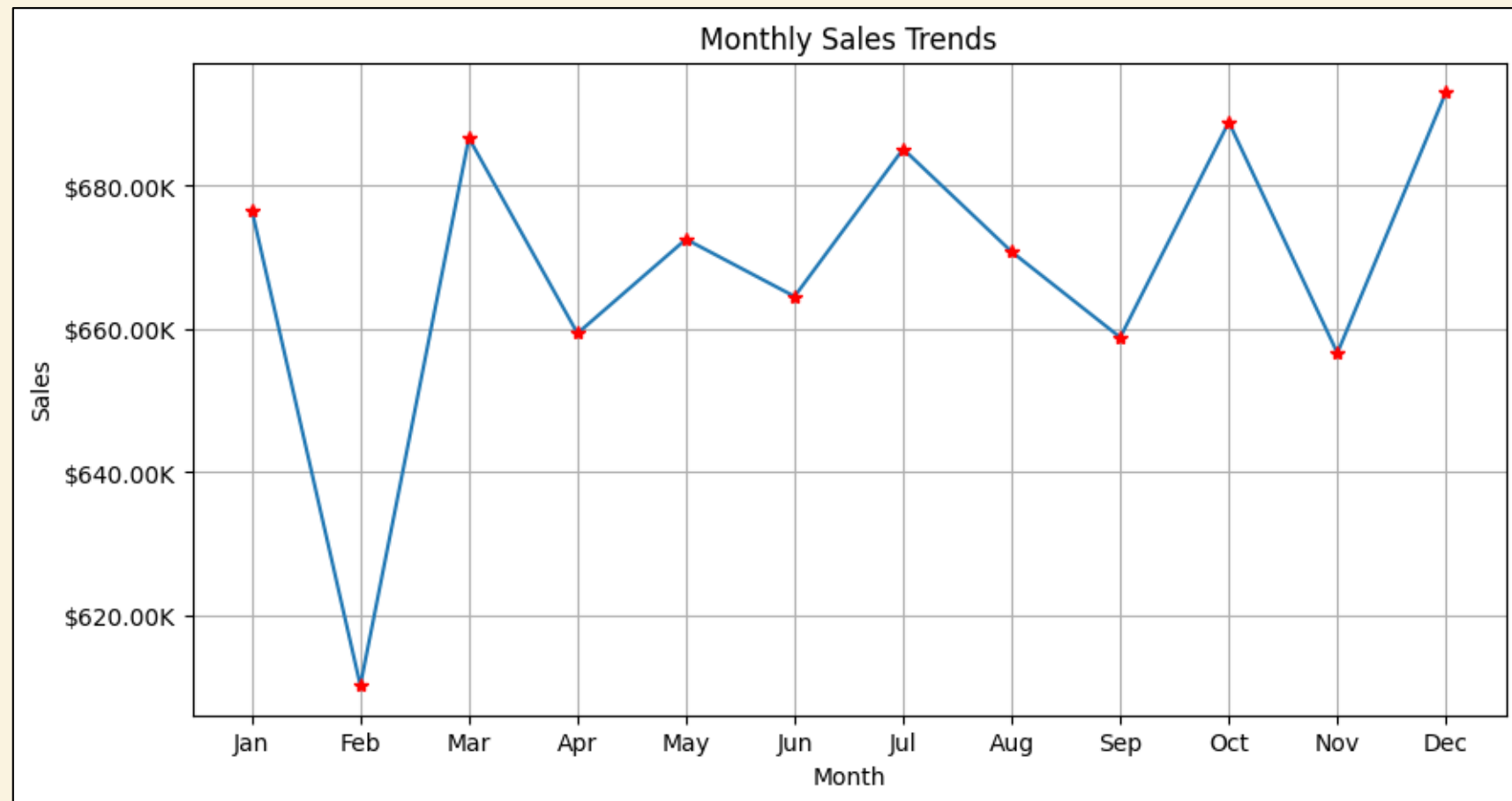
This chart shows data points  
over a period of time.





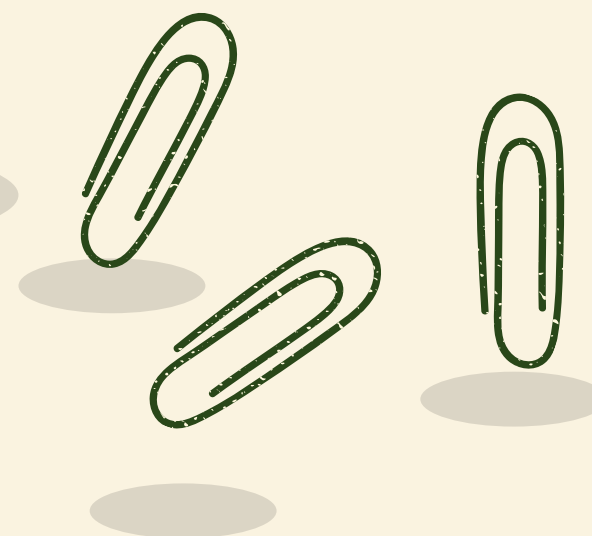
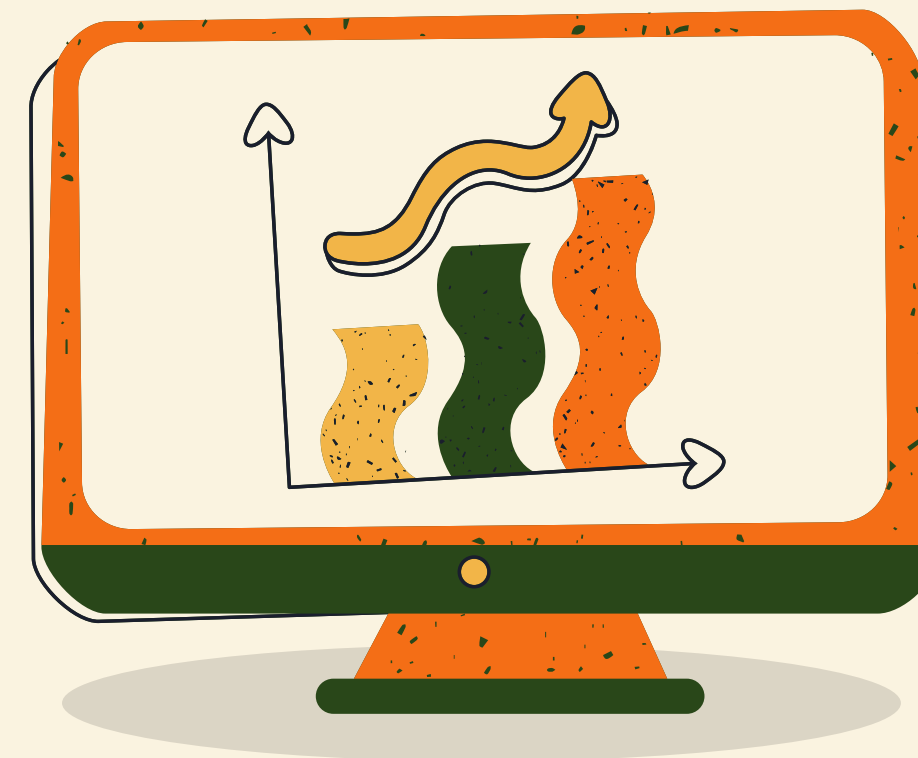
# Time Series Chart

To analyze the monthly trends based on sales and quantity.



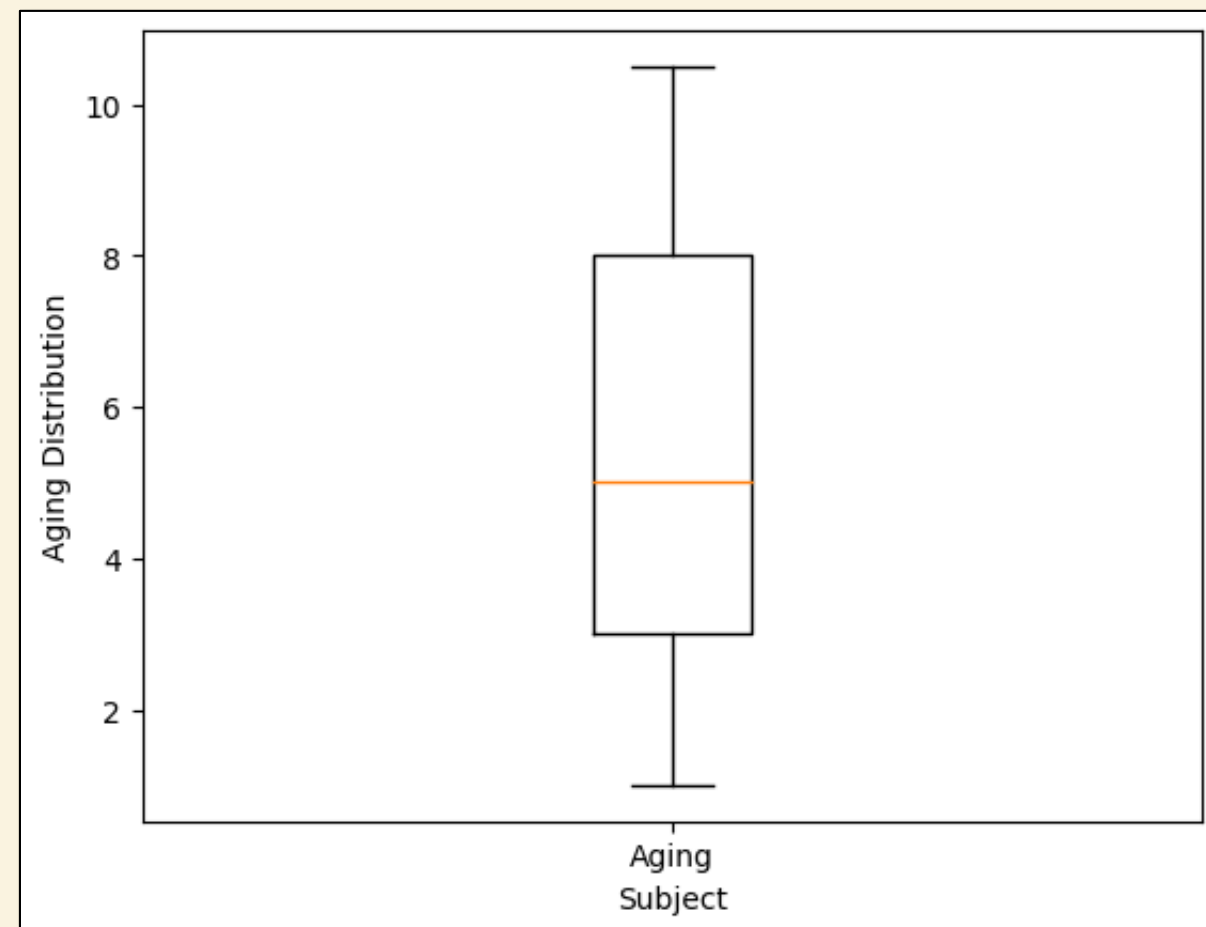
PART 4

# Boxplot & Scatterplot

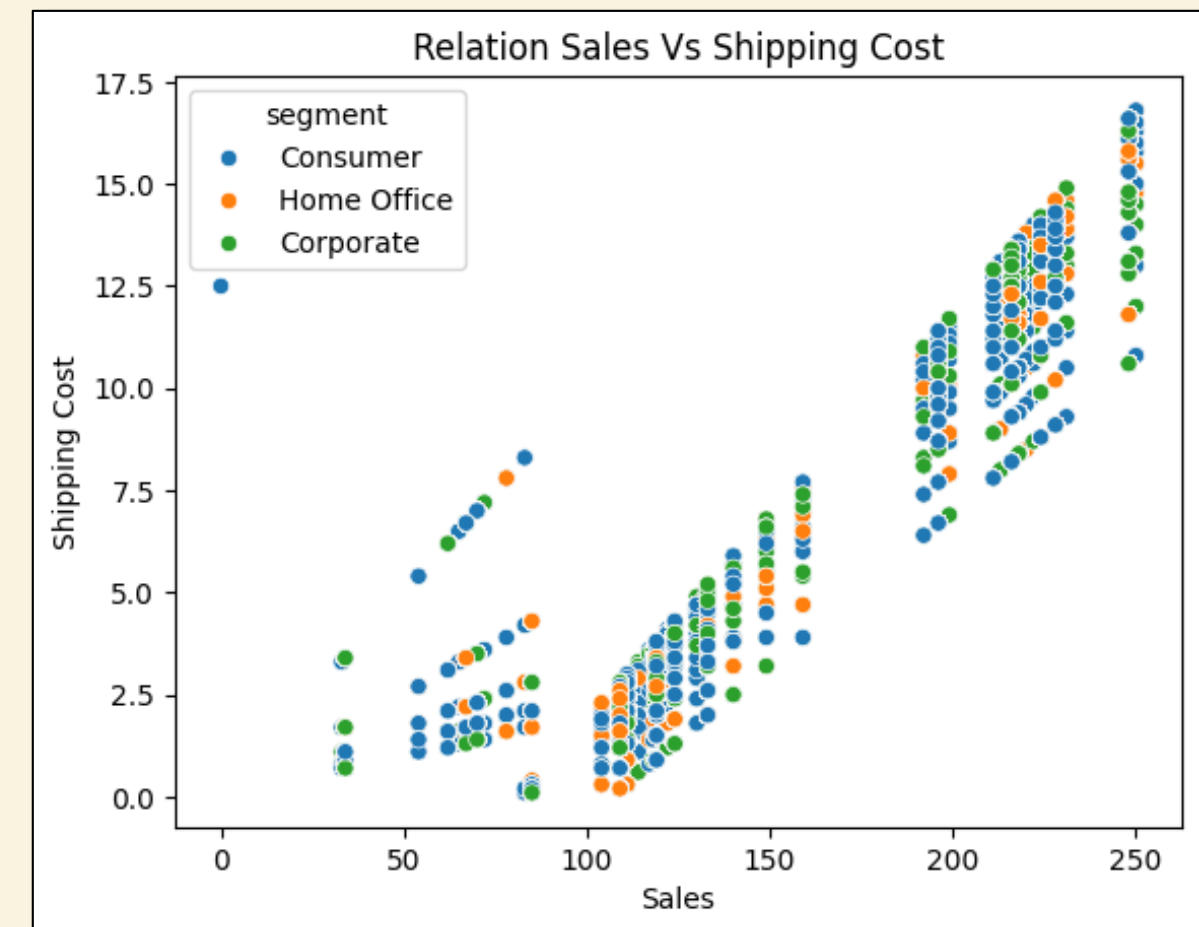


# Boxplot & Scatterplot Analysis

Inventory aging is an e-commerce metric used to calculate the total age of inventory on average. It enables companies to find out how long a Stock Keeping Unit (SKU) can remain in a warehouse before it goes up for sale.



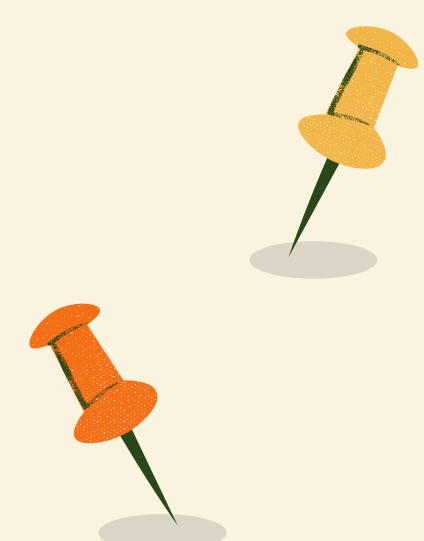
To analyze the distribution of data from the Sales and Shipping Cost columns based on the Segment column.



## PART 5

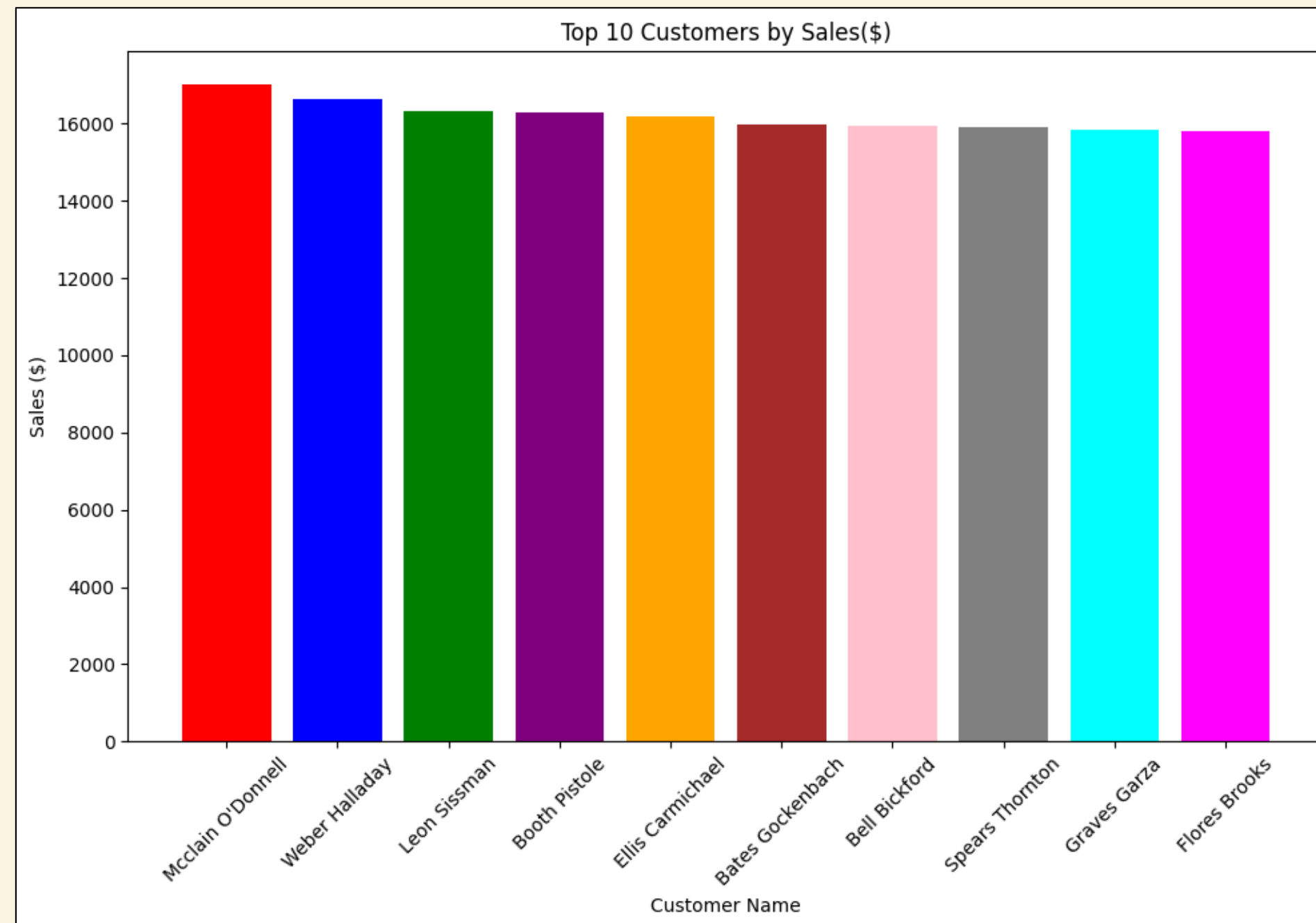
# Bar Chart

Visualize the data distribution using  
a bar chart.



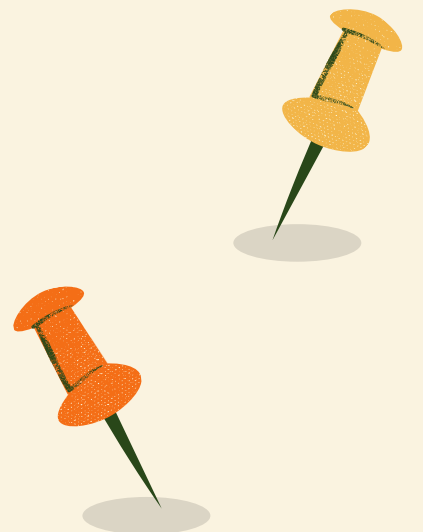
# Bar Chart

View the top 10 customers by sales using a bar chart.



PART 6

# Looker Studio





Overview

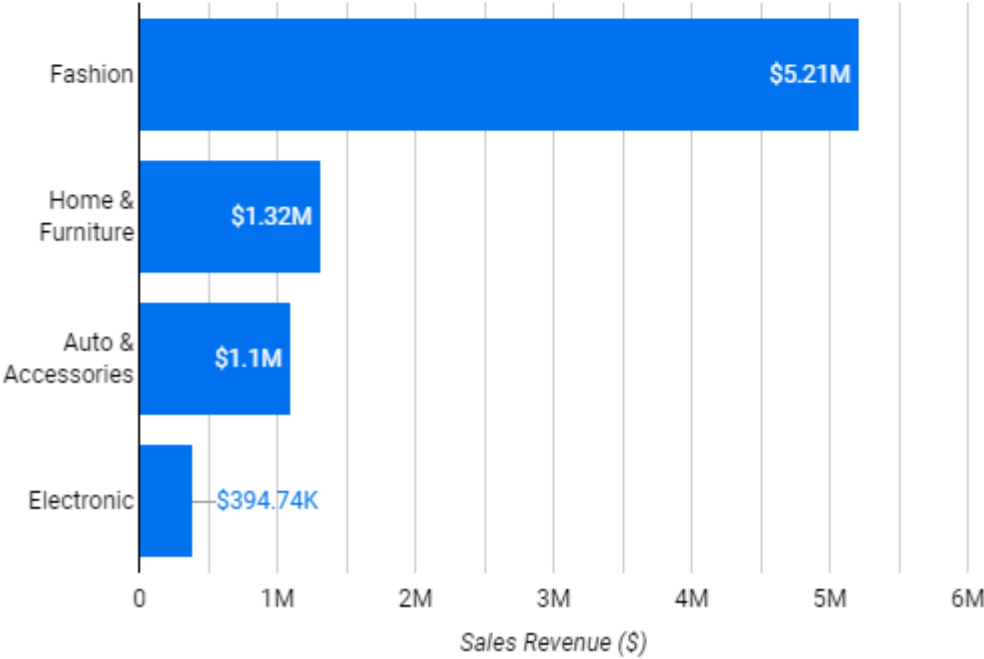
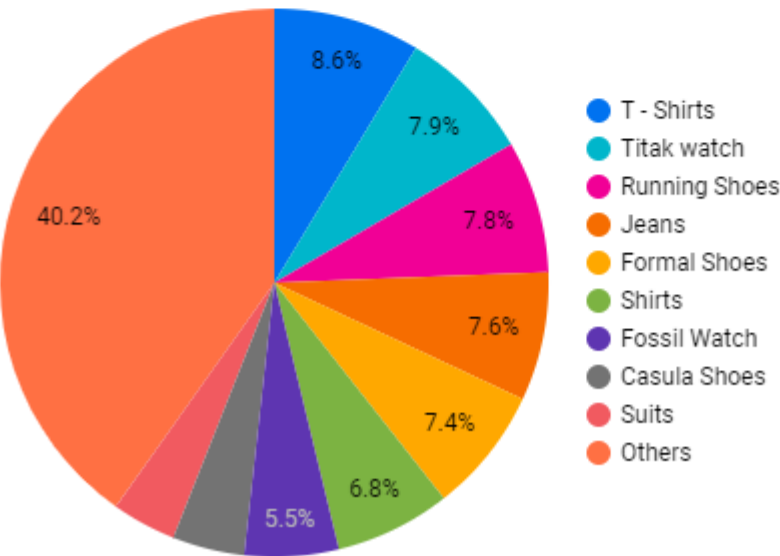
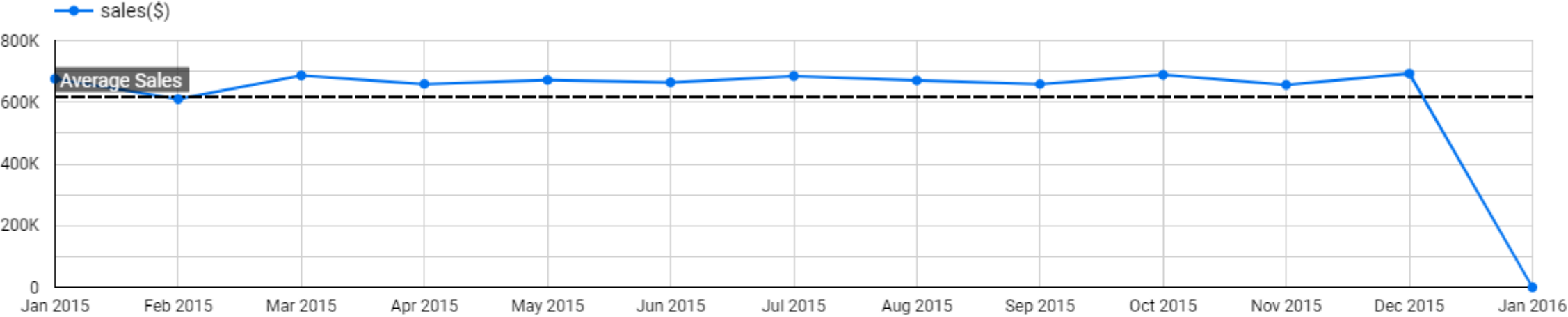
Select date range

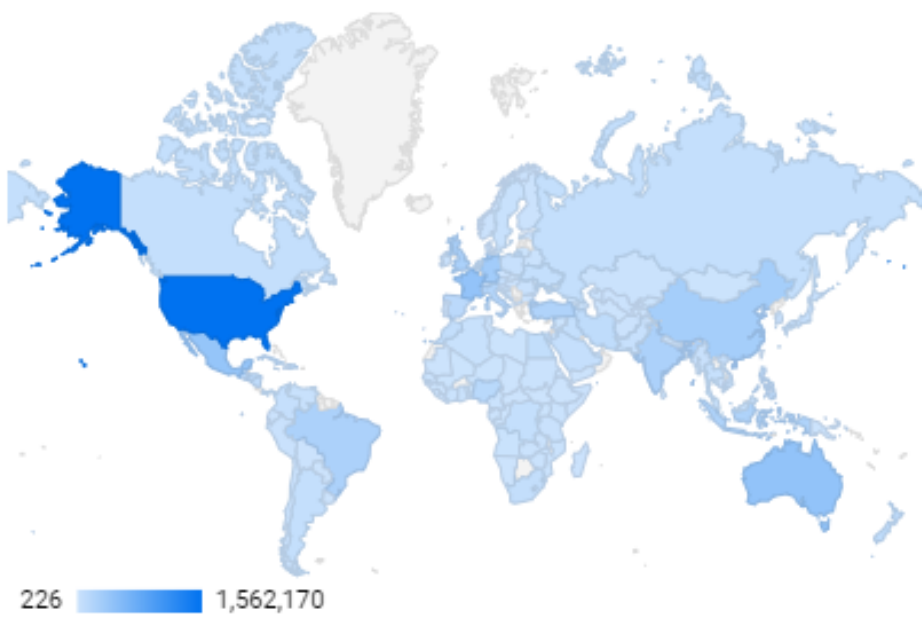
Buyer  
51,290

Total Item Sold  
51,294

Sales Average (\$)  
\$156.42

Sales Revenue (\$)  
\$8,023,510.00





country ▾

	customer_name	quantity	Discount Amount (\$)	sales(\$) ▾
1.	Mcclain O'Donnell	353 <div></div>	3 <div></div>	\$17,015 <div></div>
2.	Weber Halladay	295 <div></div>	3 <div></div>	\$16,632 <div></div>
3.	Leon Sissman	274 <div></div>	3 <div></div>	\$16,321 <div></div>
4.	Booth Pistole	304 <div></div>	3 <div></div>	\$16,291 <div></div>
5.	Ellis Carmichael	279 <div></div>	3 <div></div>	\$16,174 <div></div>
6.	Bates Gockenbach	314 <div></div>	3 <div></div>	\$15,968 <div></div>
7.	Bell Bickford	285 <div></div>	3 <div></div>	\$15,932 <div></div>
8.	Spears Thornton	342 <div></div>	3 <div></div>	\$15,922 <div></div>
9.	Graves Garza	268 <div></div>	3 <div></div>	\$15,833 <div></div>