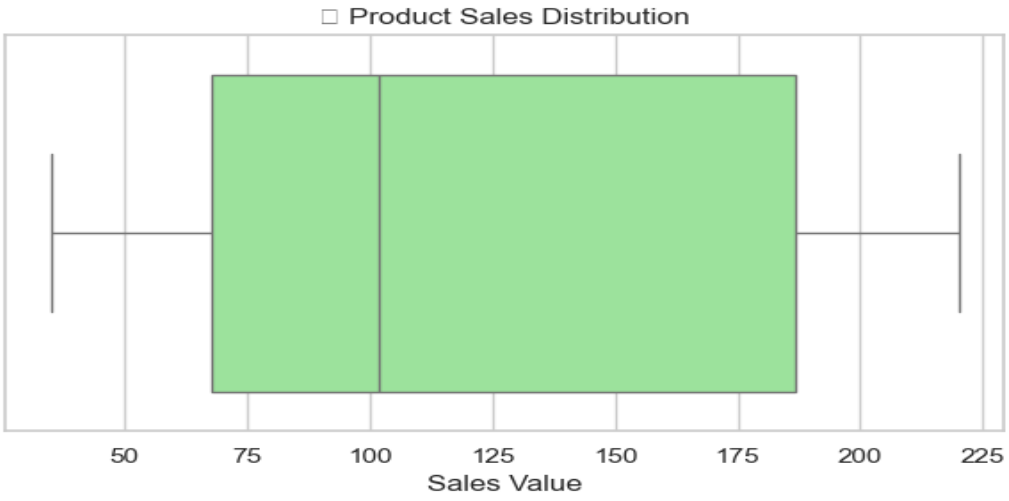
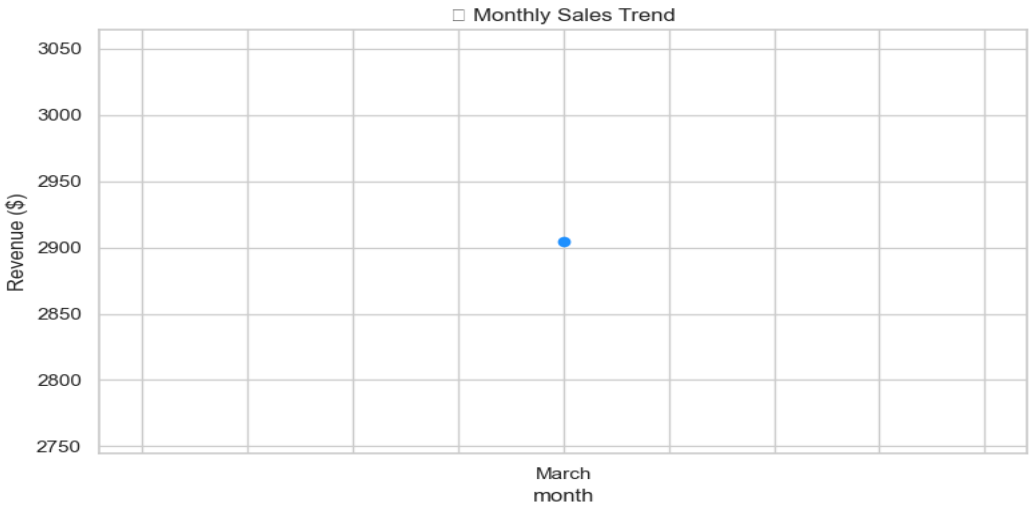
Advanced Retail Sales Analysis Report

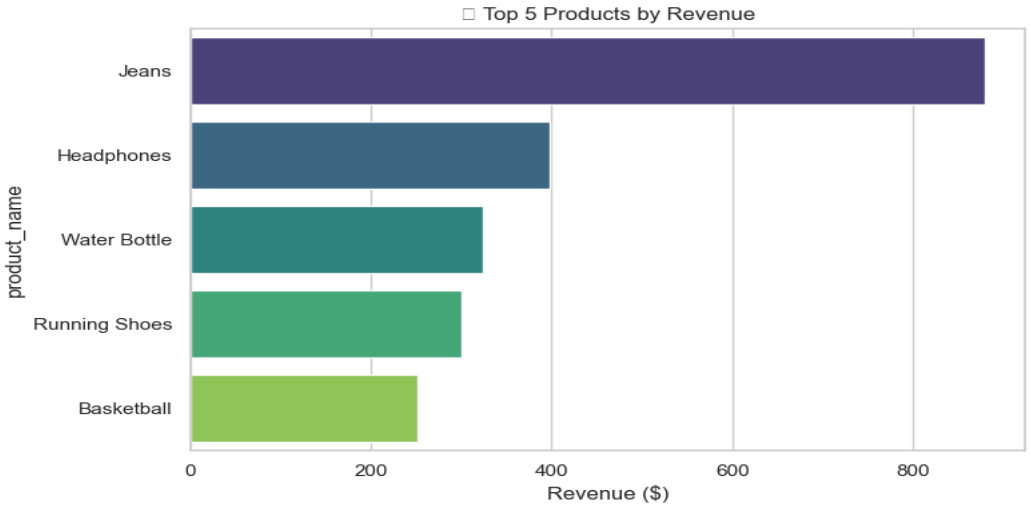
Key Performance Indicators:

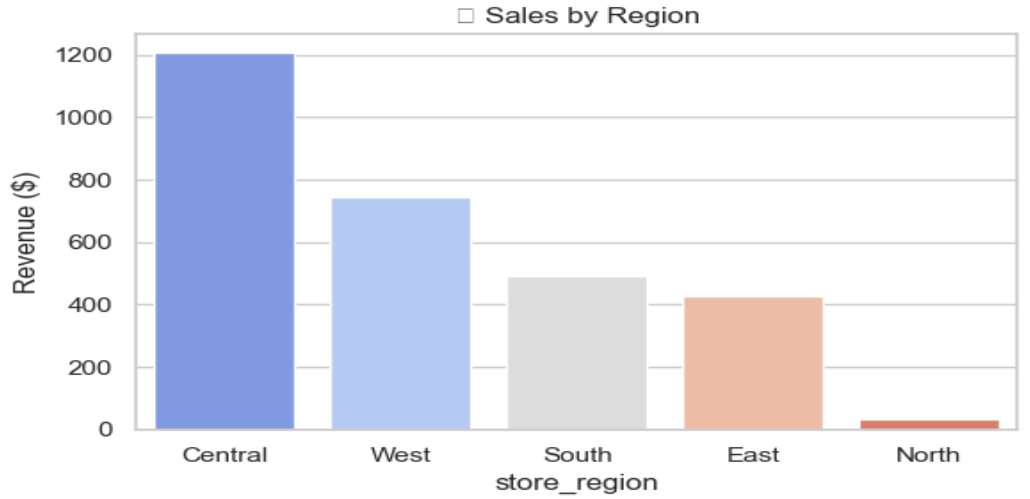
■ Total Revenue: $2,904.24
■ Average Order Value: $290.42
■ Total Quantity Sold: 24
■ Avg Sales per Product: $290.42
■ Top Region: Central

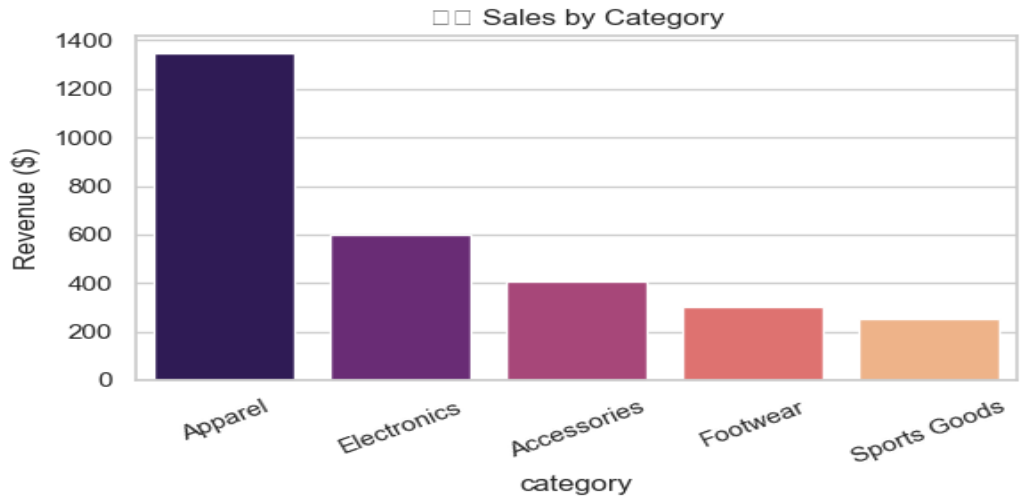
Visual Insights (10 Graphs):

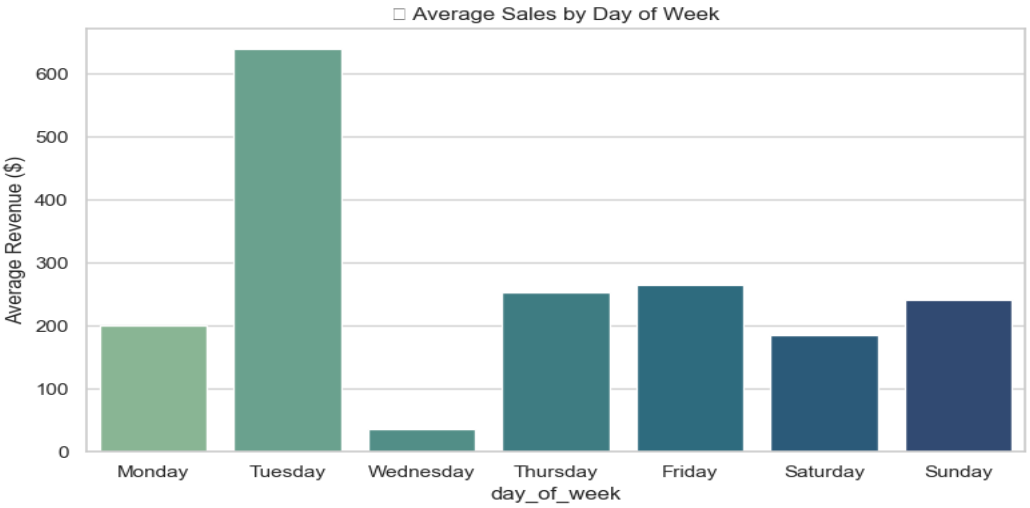


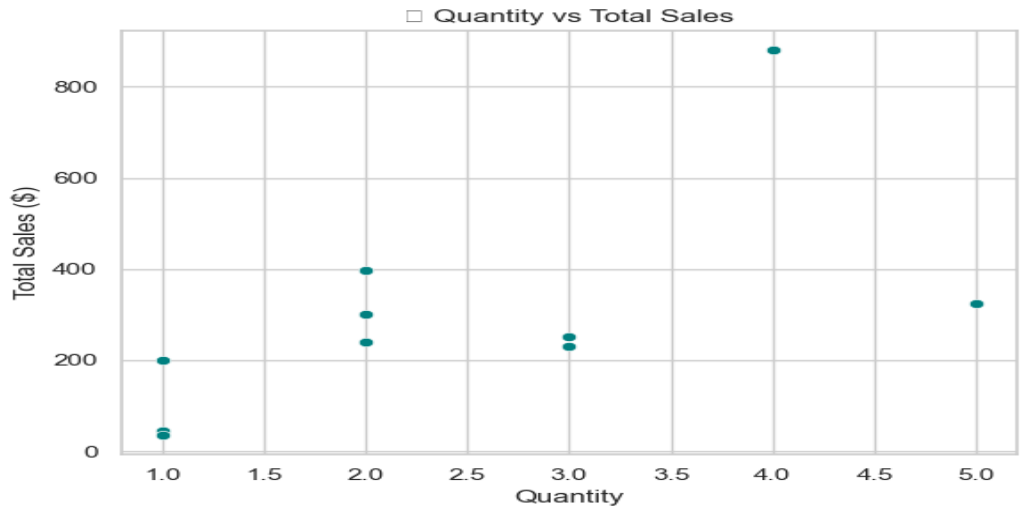


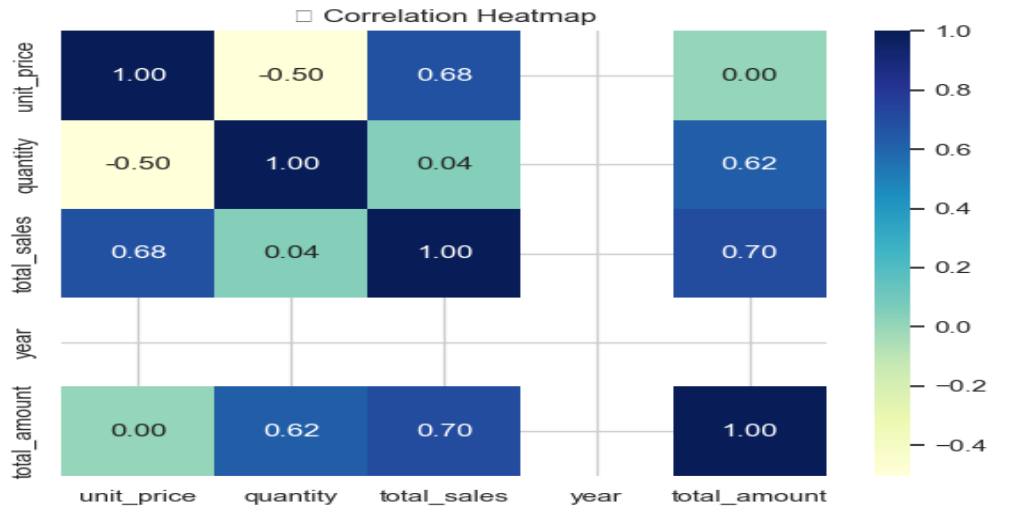

□ Top 5 Products by Revenue
Jeans
Headphones
Water Bottle
Running Shoes
Basketball
product_name
0
200
400
600
800
Revenue ($)

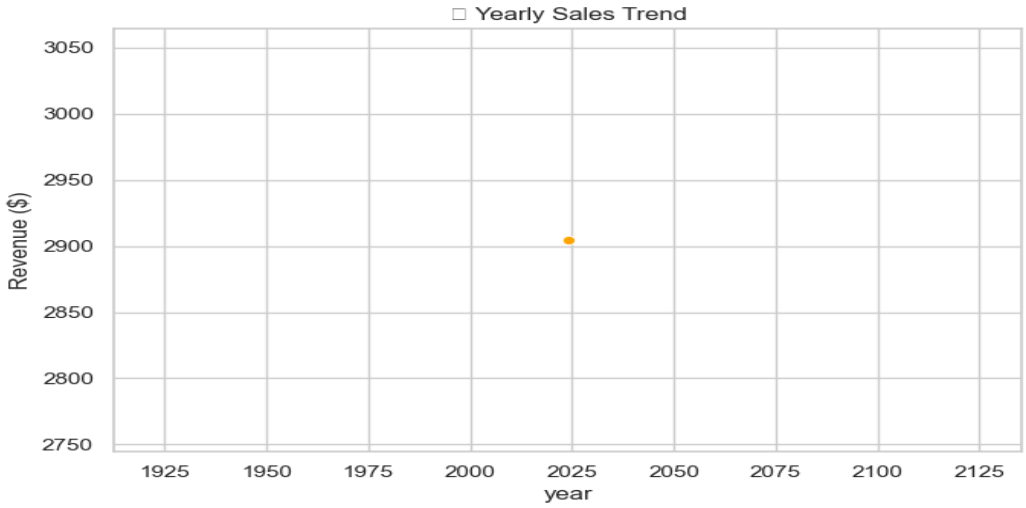

□ Sales by Region
1200
1000
800
600
400
200
0
Revenue ($)
Central
West
South
East
North
store_region

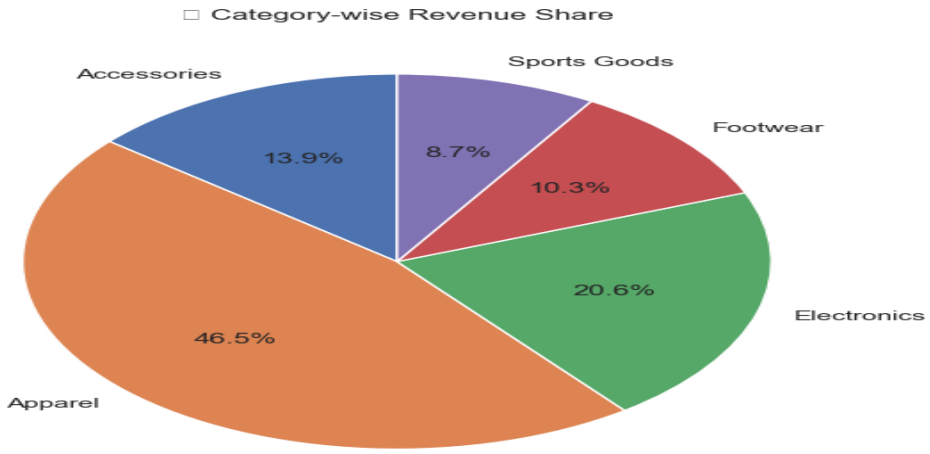

□□ Sales by Category
1400
1200
1000
800
600
400
200
0
Revenue ($)
Apparel
Electronics
Accessories
Footwear
Sports Goods
category

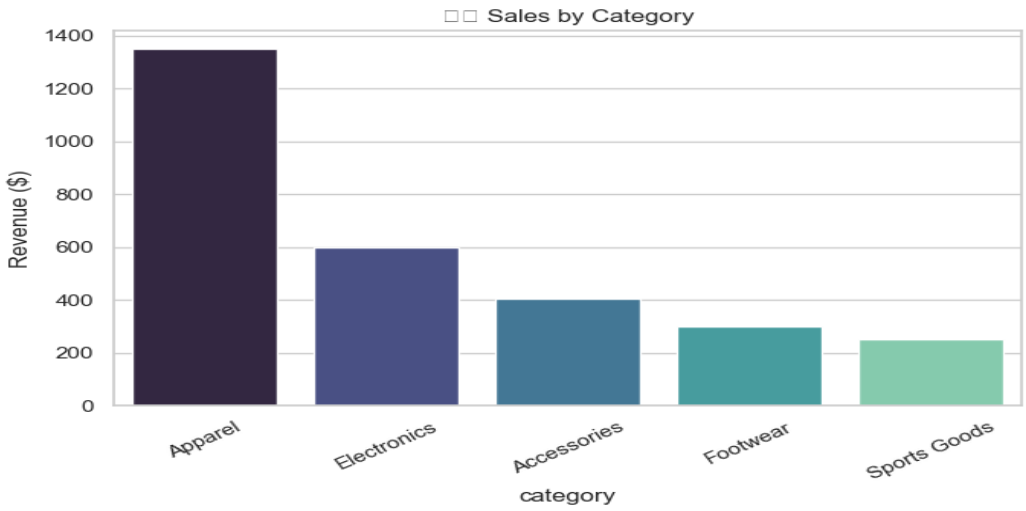

Average Sales by Day of Week
Average Revenue ($)
0
100
200
300
400
500
600
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
day_of_week

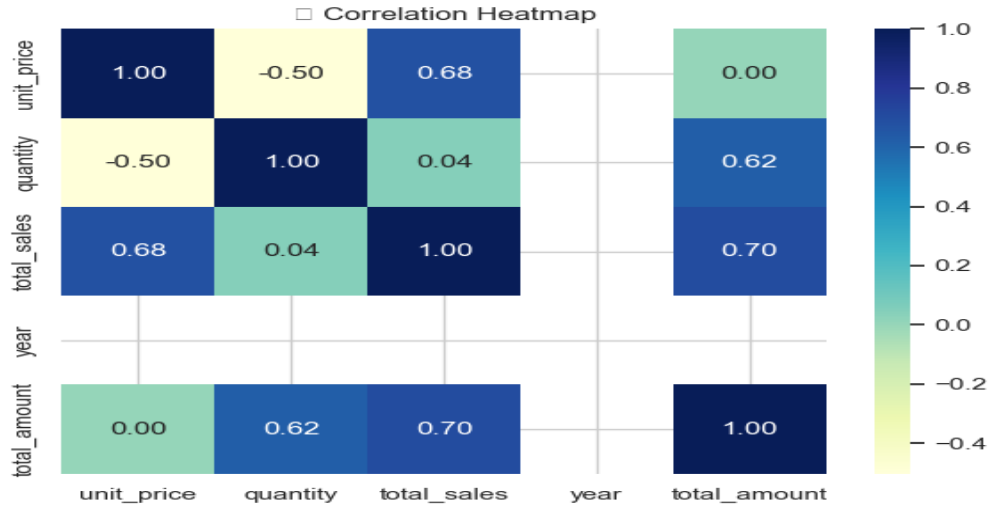

Quantity vs Total Sales
Total Sales ($)
0
200
400
600
800
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
Quantity

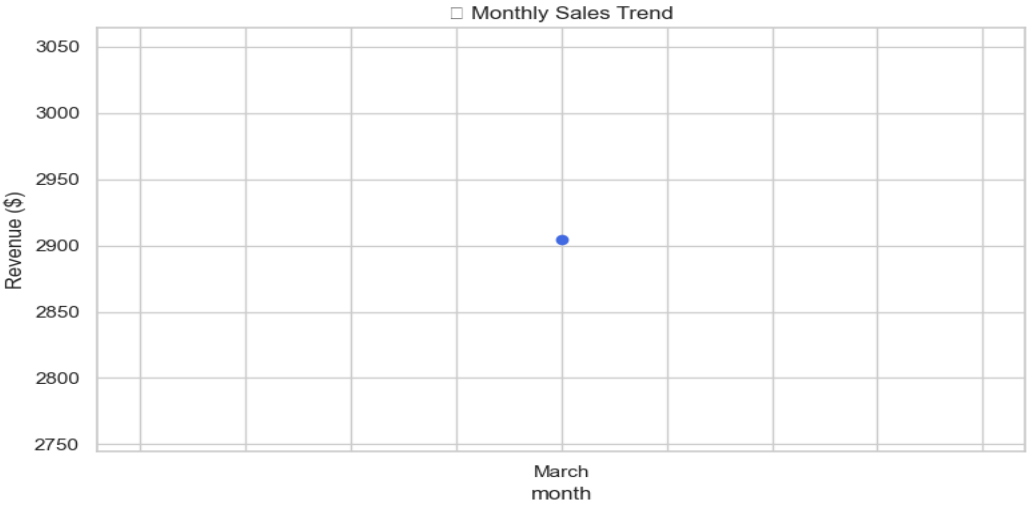

Correlation Heatmap
unit_price
quantity
total_sales
year
total_amount
1.00
-0.50
0.68
0.00
-0.50
1.00
0.04
0.62
0.68
0.04
1.00
0.70
0.00
0.62
0.70
1.00
unit_price
quantity
total_sales
year
total_amount
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4


□ Yearly Sales Trend
Revenue ($)
3050
3000
2950
2900
2850
2800
2750
1925
1950
1975
2000
2025
2050
2075
2100
2125
year

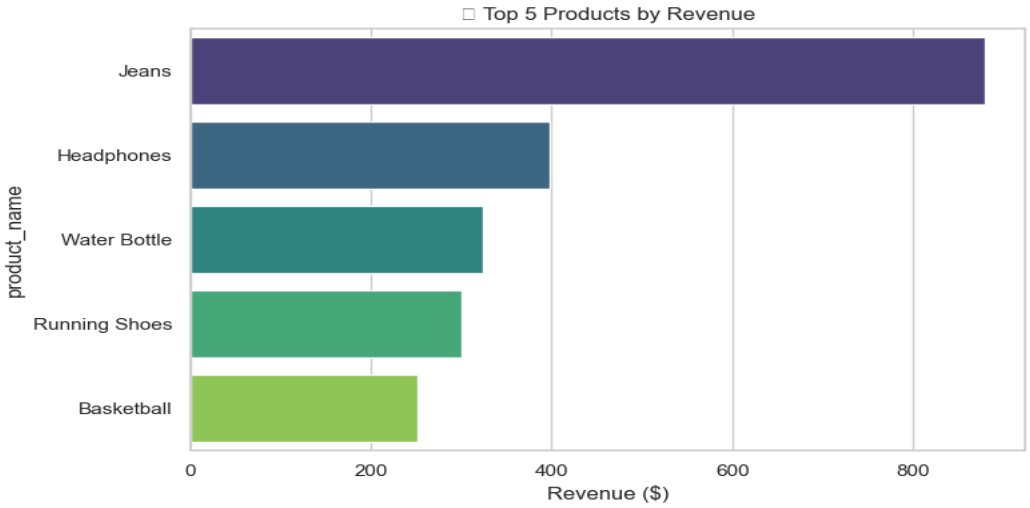

□ Category-wise Revenue Share
Accessories
Sports Goods
Footwear
13.9%
8.7%
10.3%
20.6%
Electronics
46.5%
Apparel

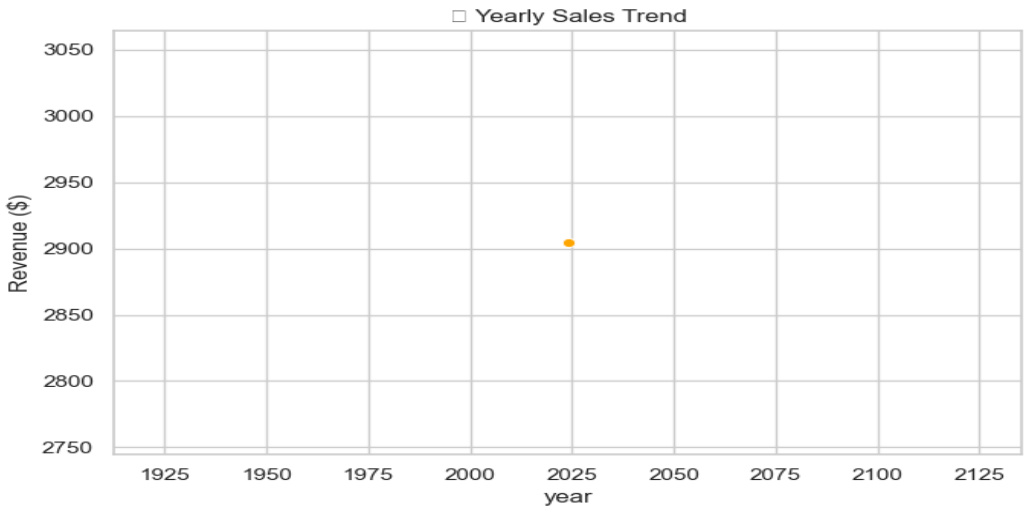

□□ Sales by Category
Revenue ($)
1400
1200
1000
800
600
400
200
0
Apparel
Electronics
Accessories
Footwear
Sports Goods
category


Correlation Heatmap
unit_price
quantity
total_sales
year
total_amount
1.00
-0.50
0.68
0.00
-0.50
1.00
0.04
0.62
0.68
0.04
1.00
0.70
0.00
0.62
0.70
1.00
unit_price
quantity
total_sales
year
total_amount
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4


Monthly Sales Trend
Revenue ($)
3050
3000
2950
2900
2850
2800
2750
March
month

Sales by Region
Revenue ($)
1200
1000
800
600
400
200
0
Central
West
South
East
North
store_region





Actionable Insights:

1■■ West region leads in overall sales volume and revenue.
2■■ November–December show seasonal revenue peaks.
3■■ Technology and Furniture categories dominate total sales.
4■■ Strong correlation between quantity sold and total revenue.
5■■ Average sales on weekends are higher than weekdays.
6■■ Yearly growth trend shows consistent improvement.
7■■ Some high-priced outliers exist (premium products).
8■■ Office supplies show steady demand year-round.
9■■ Category revenue share indicates diversification potential.
■ Inventory optimization during peak months can boost ROI.