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CLASS : BE COMPS A
BATCH : ADV BATCH F

# ADV EXPERIMENT 1

**DATASET :**
E-commerce sales dataset -
https://www.kaggle.com/datasets/thedevastator/unlock-profits-with-e-commerce-sales-data

**DATASET DESCRIPTION :**
This dataset provides detailed insights into Amazon sales data, including SKU Code, Design Number, Stock, Category, Size and Color, to help optimize product profitability

Category: Type of product. (String)
Size: Size of the product. (String)
Date: Date of the sale. (Date)
Status: Status of the sale. (String)
Fulfilment: Method of fulfilment. (String)
Style: Style of the product. (String)
SKU: Stock Keeping Unit. (String)
ASIN: Amazon Standard Identification Number. (String)
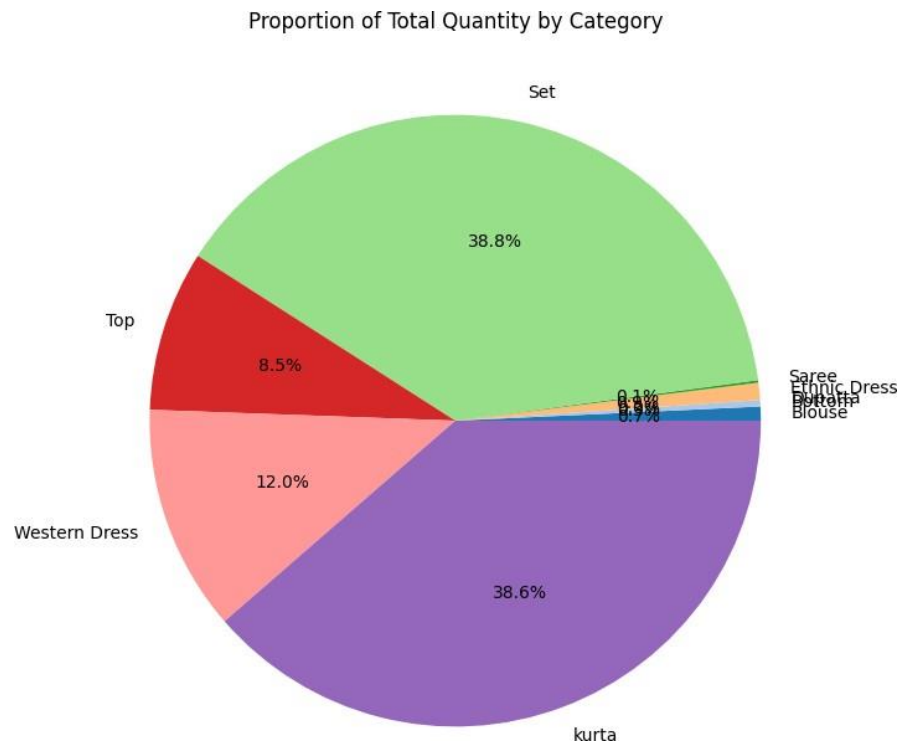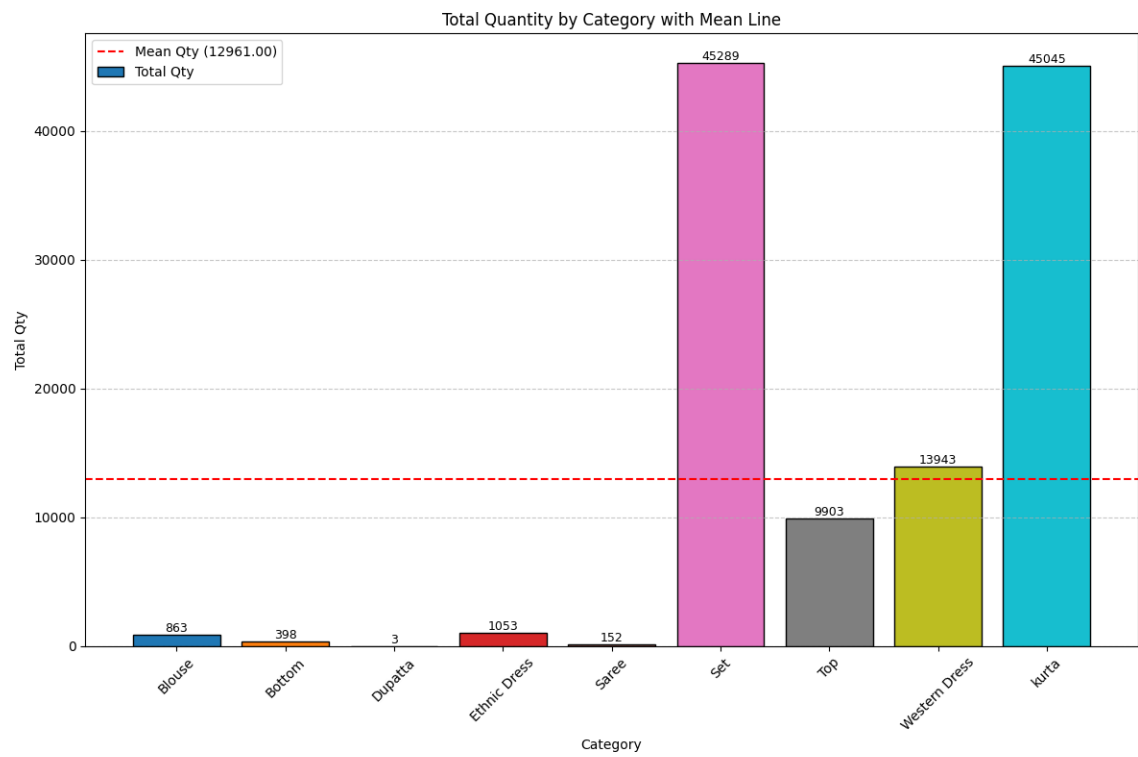Courier Status: Status of the courier. (String)
Qty: Quantity of the product. (Integer)
Amount: Amount of the sale. (Float)
B2B: Business to business sale. (Boolean)
Currency: The currency used for the sale. (String)

# REPORT :



**Total Quantity by Category with Mean Line**

- - - Mean Qty (12961.00)
- Total Qty

| Category | Total Qty |
|---|---|
| Blouse | 863 |
| Bottom | 398 |
| Dupatta | 3 |
| Ethnic Dress | 1053 |
| Saree | 152 |
| Set | 45289 |
| Top | 9903 |
| Western Dress | 13943 |
| kurta | 45045 |



**Proportion of Total Quantity by Category**

- Set: 38.8%
- Top: 8.5%
- Western Dress: 12.0%
- kurta: 38.6%
- Saree: 0.1%
- Ethnic Dress
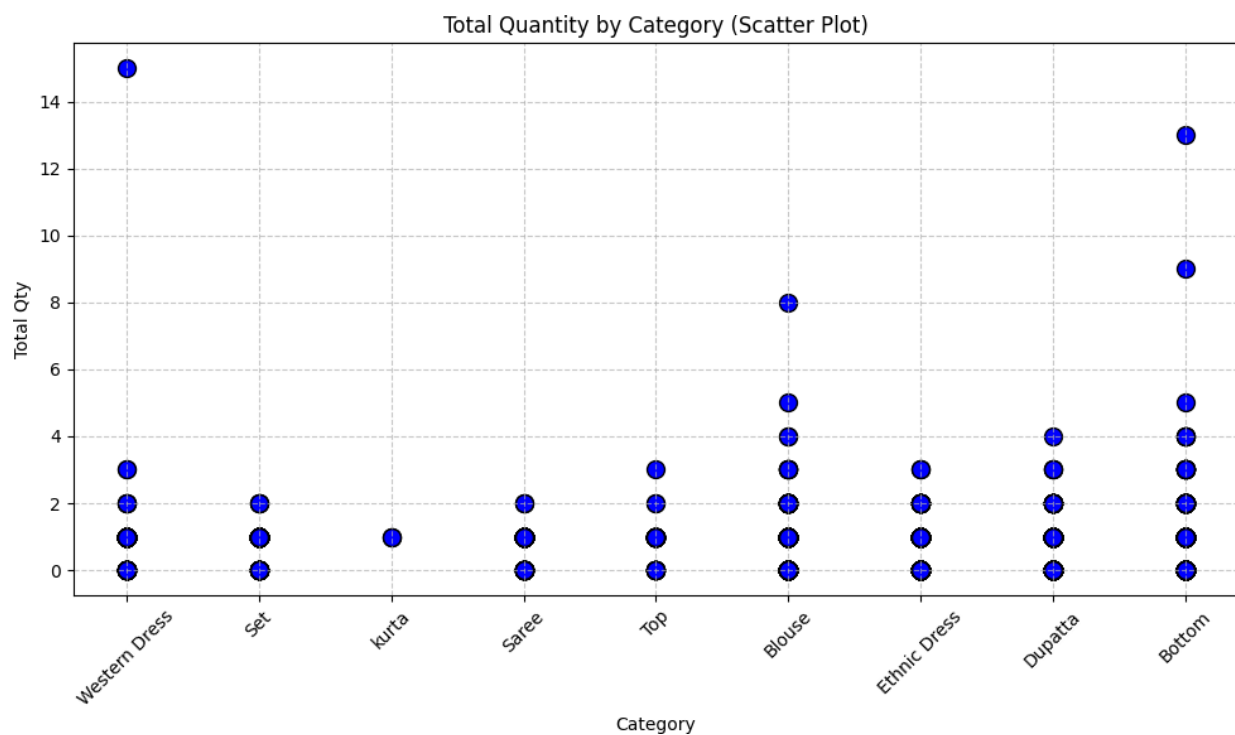- Dupatta
- Bottom
- Blouse: 0.7%

**Question:**
What insights can be drawn from the bar graph and pie chart representing the quantity of sales for each clothing category?
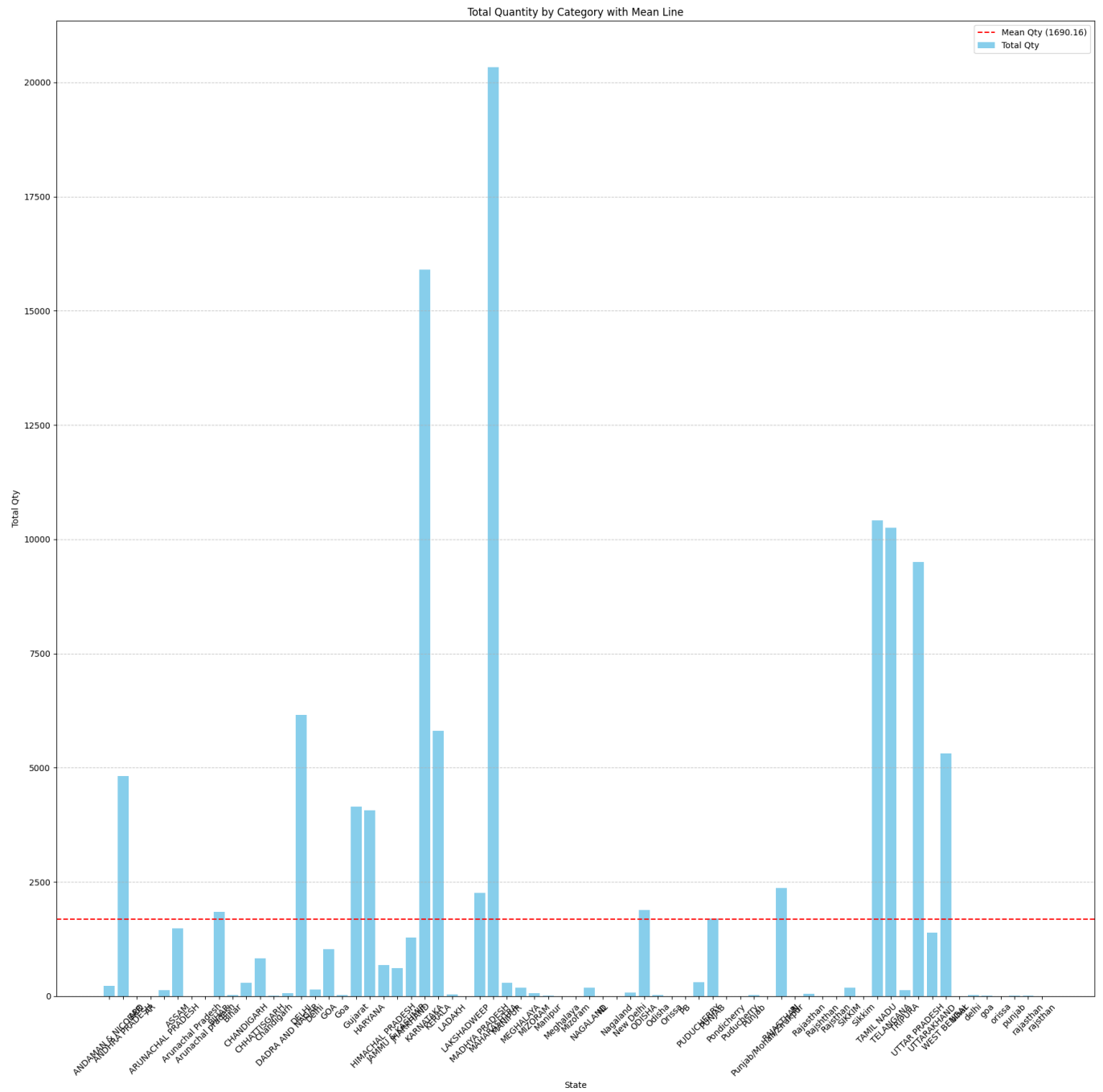
**Answer:**
The bar graph and pie chart reveal that sets and kurtas are the top-selling clothing items, followed by western dresses. These three categories are the only ones exceeding the average sales quantity. Tops also perform reasonably well, while the remaining clothing categories exhibit minimal sales.



Total Quantity by Category (Scatter Plot)

**Question:**
What does the scatter plot depicting category versus quantity reveal?

**Answer:**
The scatter plot highlights the total quantities across different clothing categories. It shows that ethnic dresses and dupattas have the highest quantities, suggesting their popularity or higher stock levels. Conversely, western dresses and sarees have the lowest quantities, indicating either lower demand or limited stock availability.

Total Quantity by Category with Mean Line

Proportion of Total Quantity by State
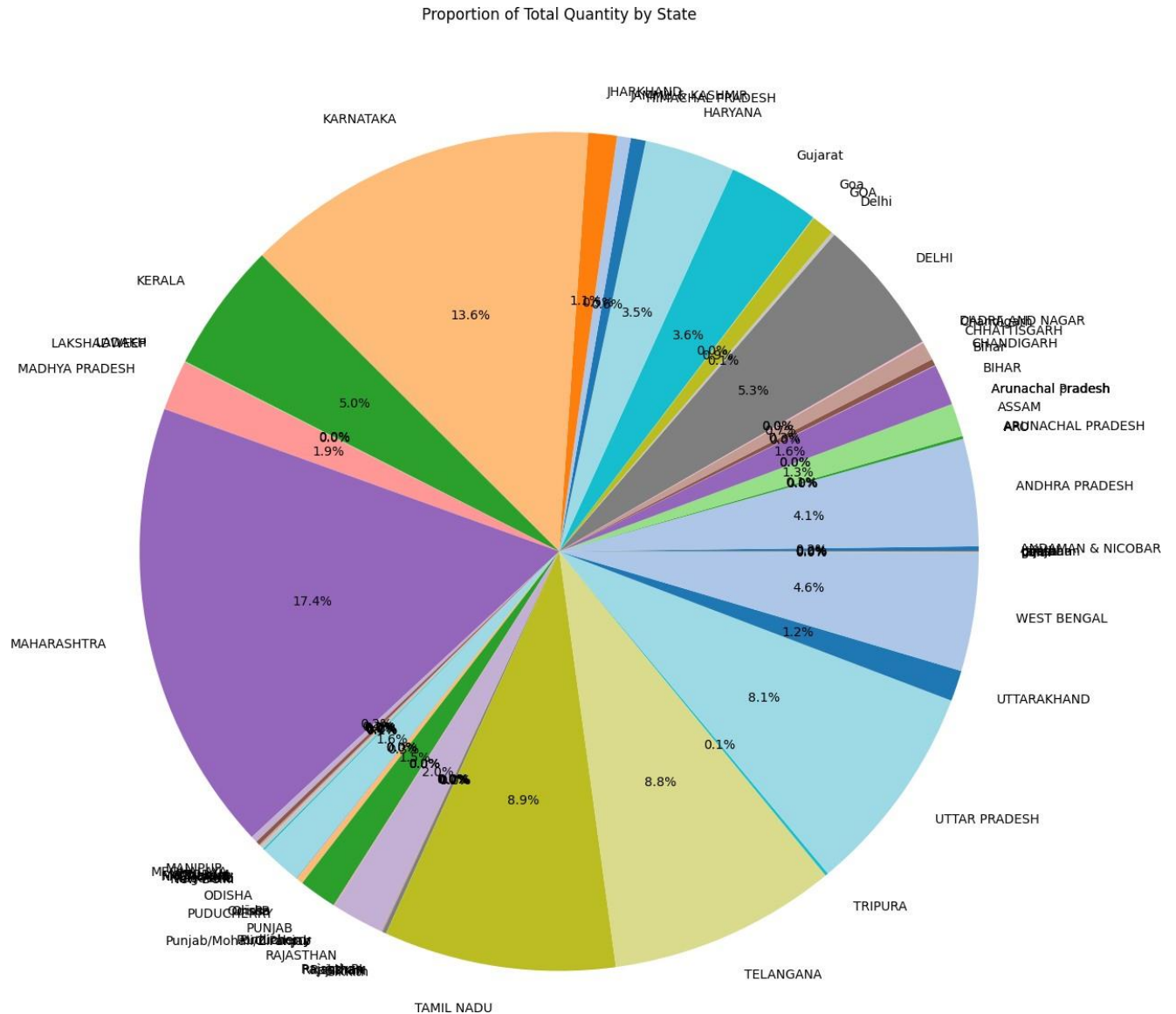
**Question:**
What insights can be derived from the state-wise distribution of clothing item sales?
**Answer:**
The data reveals that Maharashtra and Karnataka lead in clothing item sales, making them the top contributors among all regions. Tamil Nadu, Telangana, and Uttar Pradesh also play a significant role in the national sales figures. In contrast, each of the other regions contributes less than 8% to the total sales.

Time Analysis: Total Quantity by Month and Category
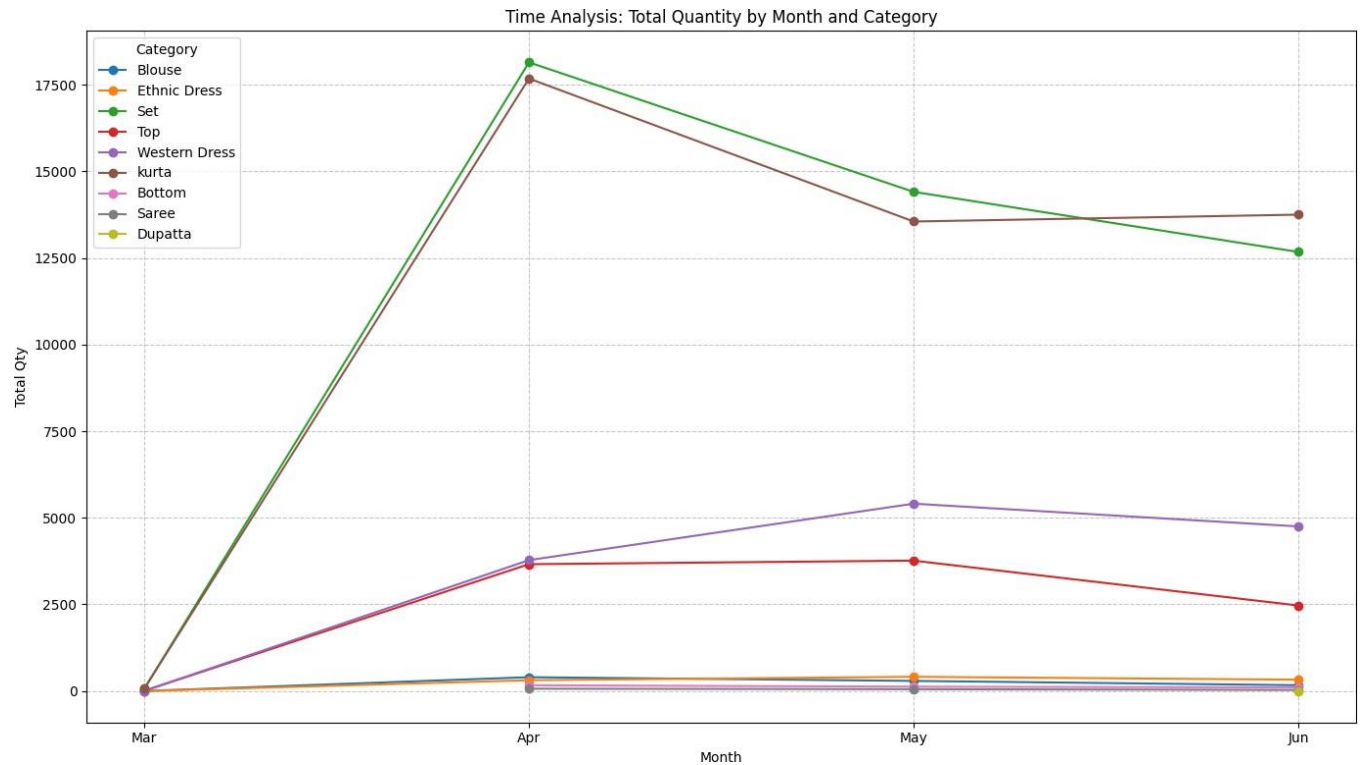
**Question:**

What insights can be derived from the monthly sales quantity depicted in the given line chart?

**Answer:**

The chart indicates a correlation between the sales of sets and kurtas, both of which peak in April. Tops and western dresses exhibit similar sales patterns, with a peak in May, likely due to the hot weather. Sales for the remaining categories remain consistently low across all months.

**CONCLUSION :**

- It can be said that sets and kurtas are the highest selling items.
- Maharashtra and Karnataka are the biggest contributors to the sales.
- The sale of these items peaks in April and the sales of many items are correlated to each other.