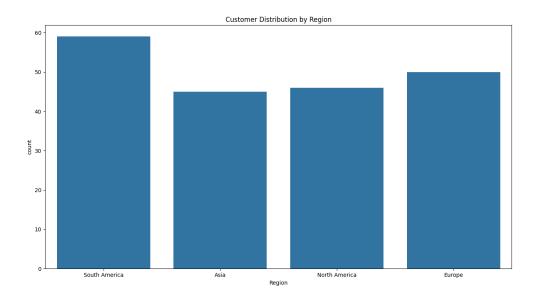
# **Key Business Insights:**

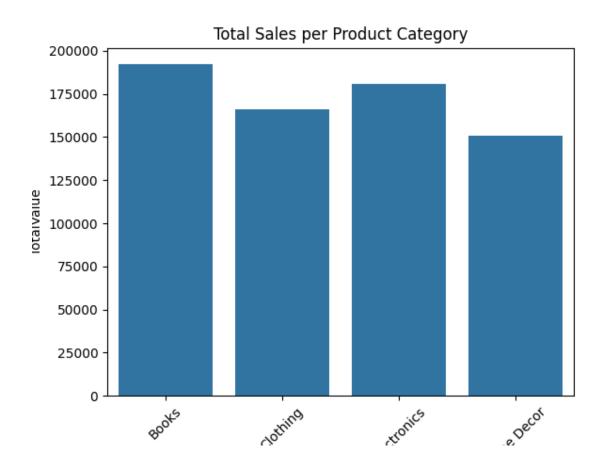
## 1. Customer Distribution by Region:

- o The count plot shows which regions have the highest number of customers.
- o If a particular region dominates, this suggests a market concentration, indicating where marketing efforts should be focused.



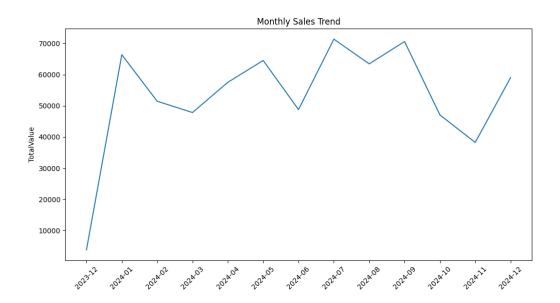
## 2. Total Sales per Product Category:

- o The bar plot shows which product categories generate the highest revenue.
- o If some categories underperform, promotional strategies may be needed to boost sales.



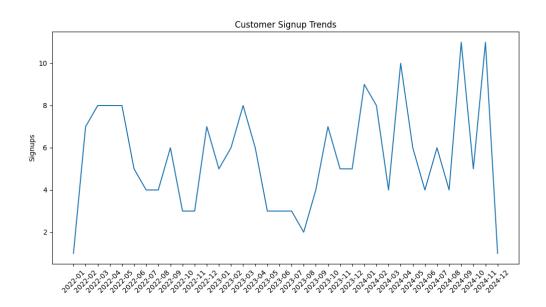
#### 3. Monthly Sales Trend:

- o The line plot displays sales fluctuations over time.
- o If we see seasonality, the business can prepare for peak demand periods by stocking up inventory or running targeted campaigns.



### 4. Top 10 Customers by Spend:

- o The highest spenders are identified.
- These customers are ideal candidates for loyalty programs and personalized marketing.



#### 5. Customer Purchase Frequency and Recency:

- This insight analyses how often customers make purchases and the recency of their latest transactions.
- o It can help identify loyal, frequent buyers versus one-time or infrequent customers.
- You can segment your customers into categories like "active," "churning," or "new" based on their last purchase date and frequency of purchases.
- This insight can guide customer retention strategies and personalized marketing efforts.

