Sales Analysis

1. Data Preparation:

The sales data from each month has been merged into one dataset for comprehensive analysis.

2. Data Cleaning:

Checked data types and for missing values, and dropped missing values to ensure data integrity.

Converted columns to its appropriate type for statistical analysis.

3. Top Products Analysis:

Identified top-selling products by analyzing the quantity ordered and revenue generated for each product.

Visualized top products using bar plots, showing the quantity ordered and revenue generated.

4. Monthly Revenue Analysis:

Analyzed monthly revenue trends to identify patterns and seasonality in sales.

Visualized monthly revenue using a line plot, highlighting the highest revenue month.

5. Hourly Revenue Analysis:

Examined hourly revenue to identify peak sales times throughout the day.

Visualized hourly revenue using a line plot, indicating the peak sales hour.
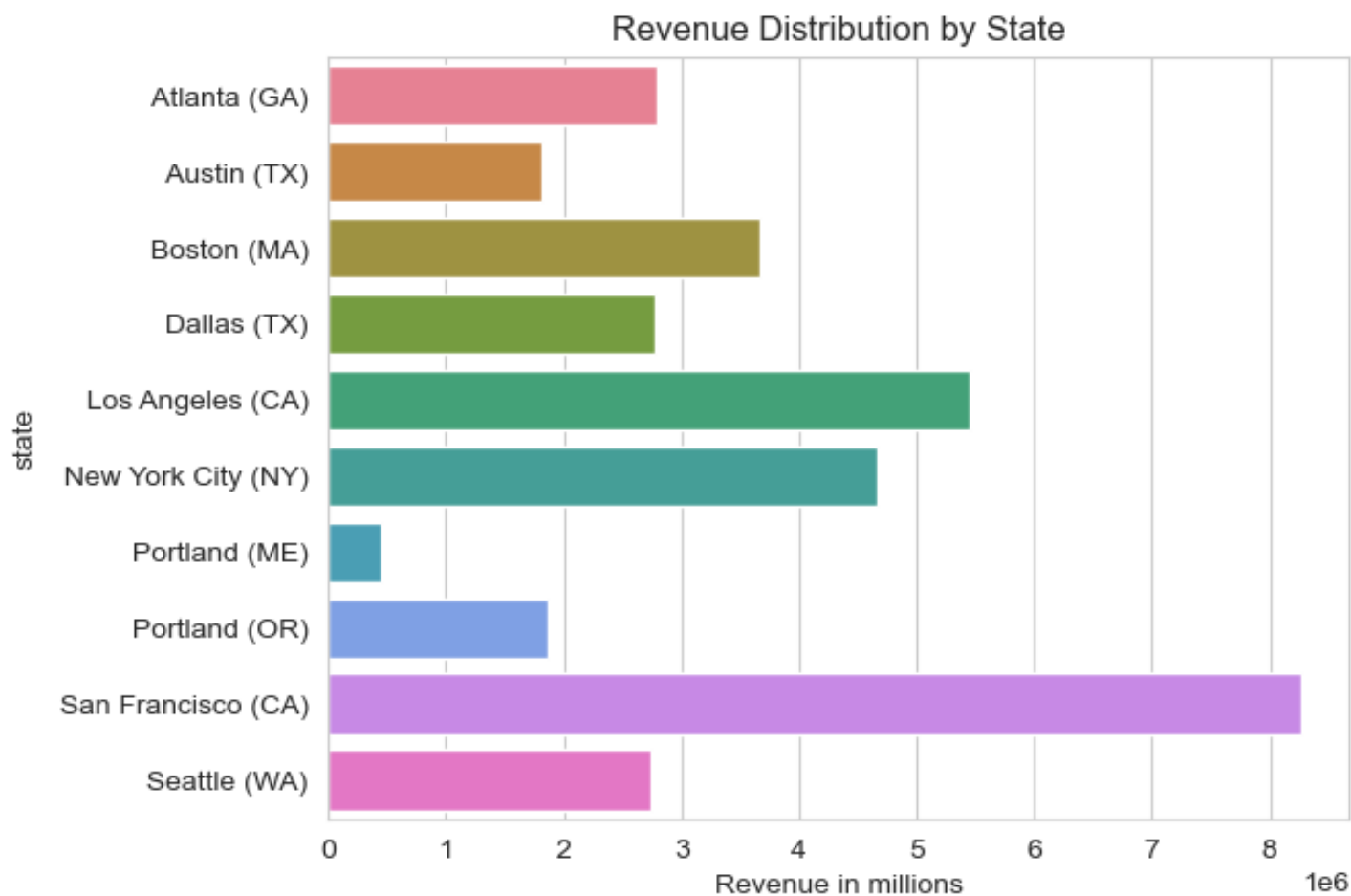
6. Revenue by State Analysis:

Investigated revenue distribution across different states to identify top revenue-generating regions.

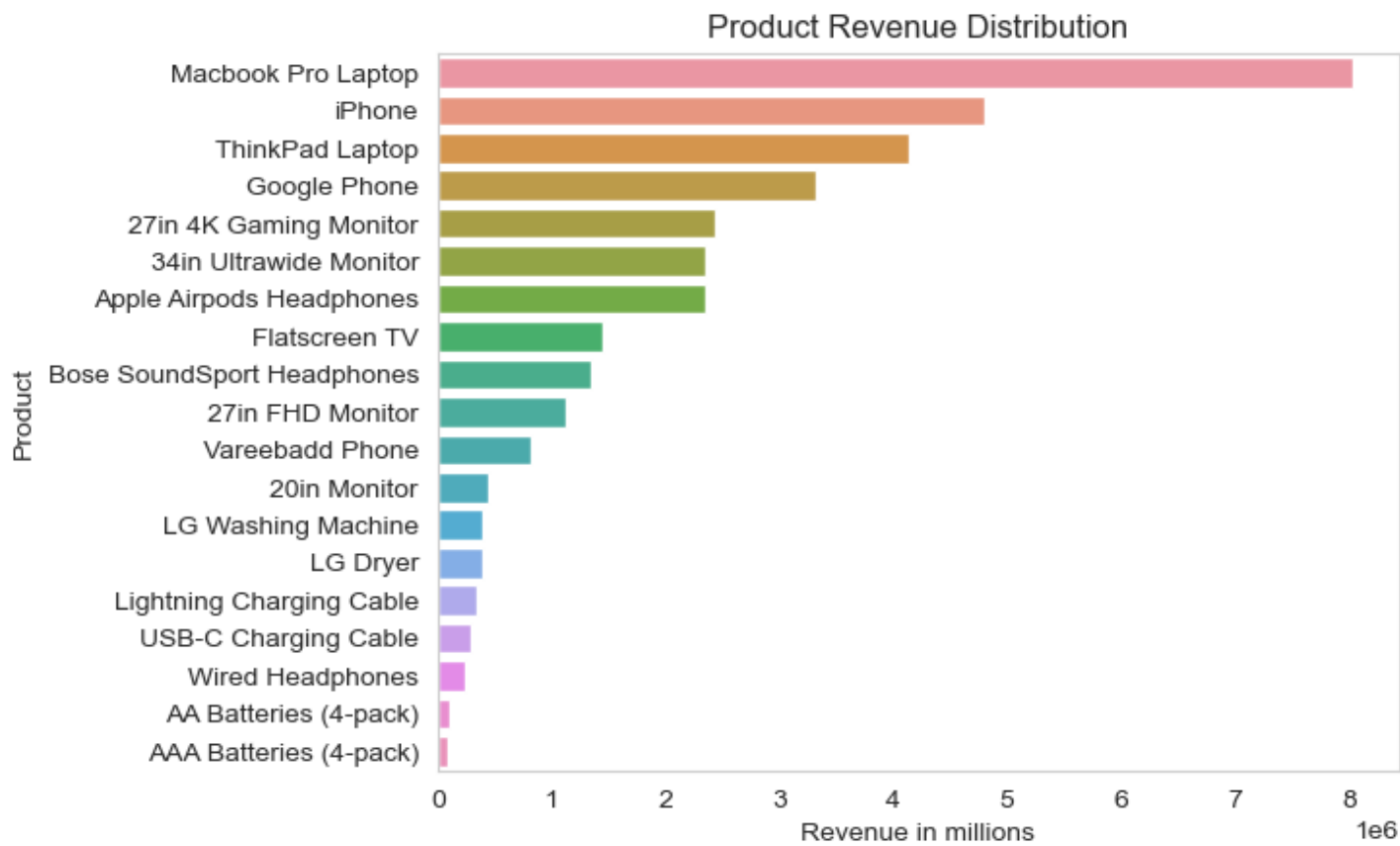Visualized revenue by state using a bar plot, highlighting the highest revenue state.
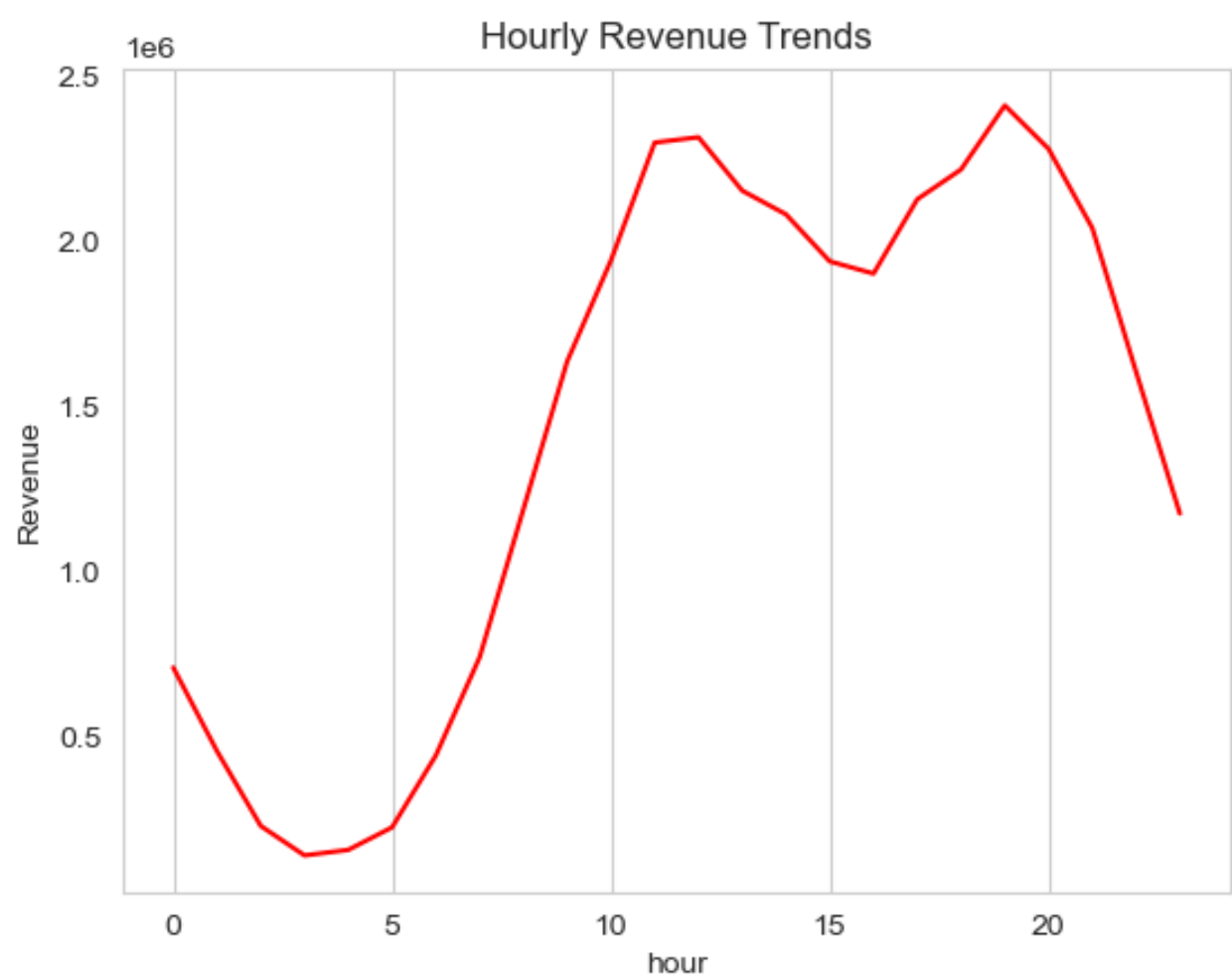
Monthly Revenue Trends

Revenue Distribution by State

Revenue Distribution by State

Product Revenue Distribution

Product Revenue Distribution

Hourly Revenue Trends

Hourly Revenue Trends

Key Insights:

The highest revenue-generating state is San Francisco.

Sales peak at 19:00 (7:00 PM), indicating the most active sales hour.

December is the month with the highest revenue, possibly due to holiday season sales.

The Macbook Pro Laptop generates the most revenue, likely because of its high price.

AAA Batteries (4-pack) has the highest quantity ordered, possibly due to its affordability.