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

Hourly Revenue Trends

Revenue Distribution by State

Product Revenue Distribution
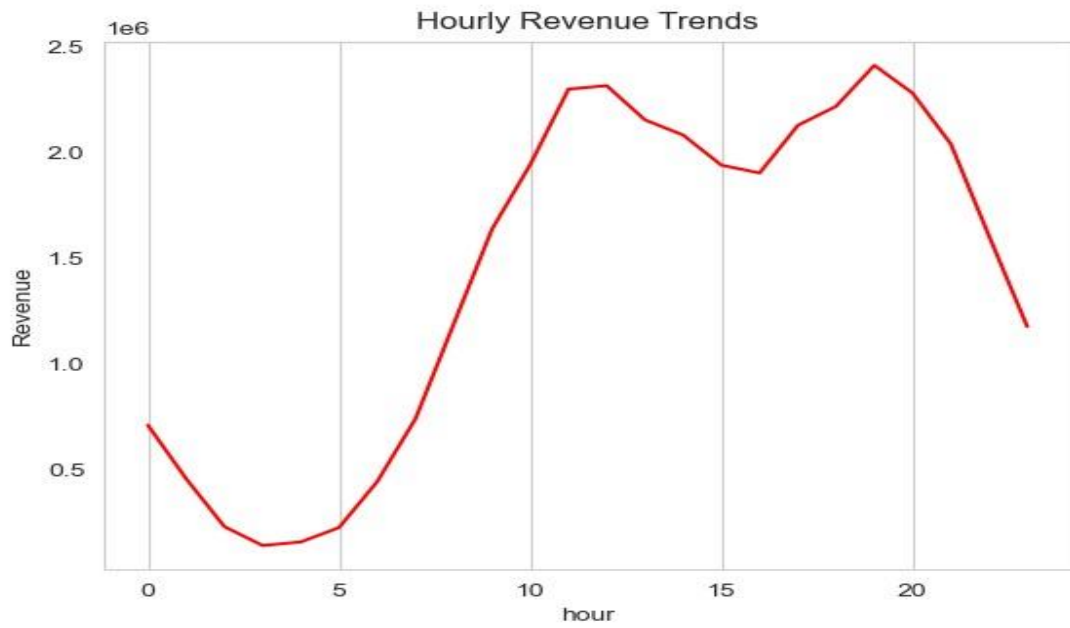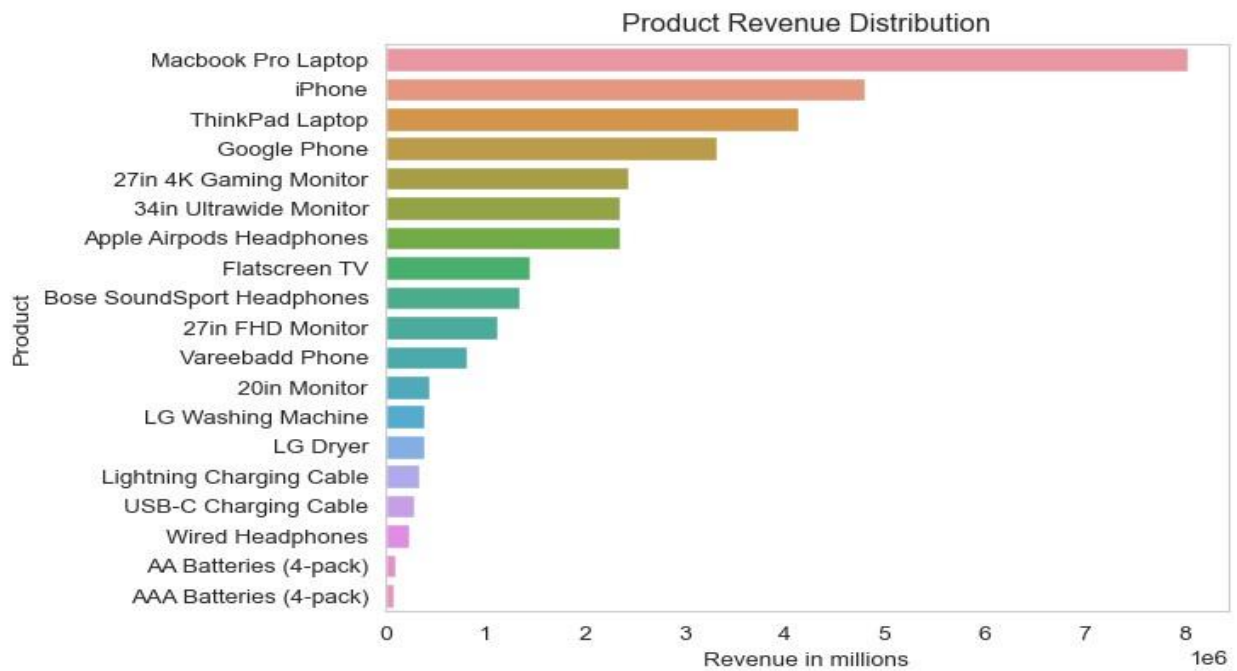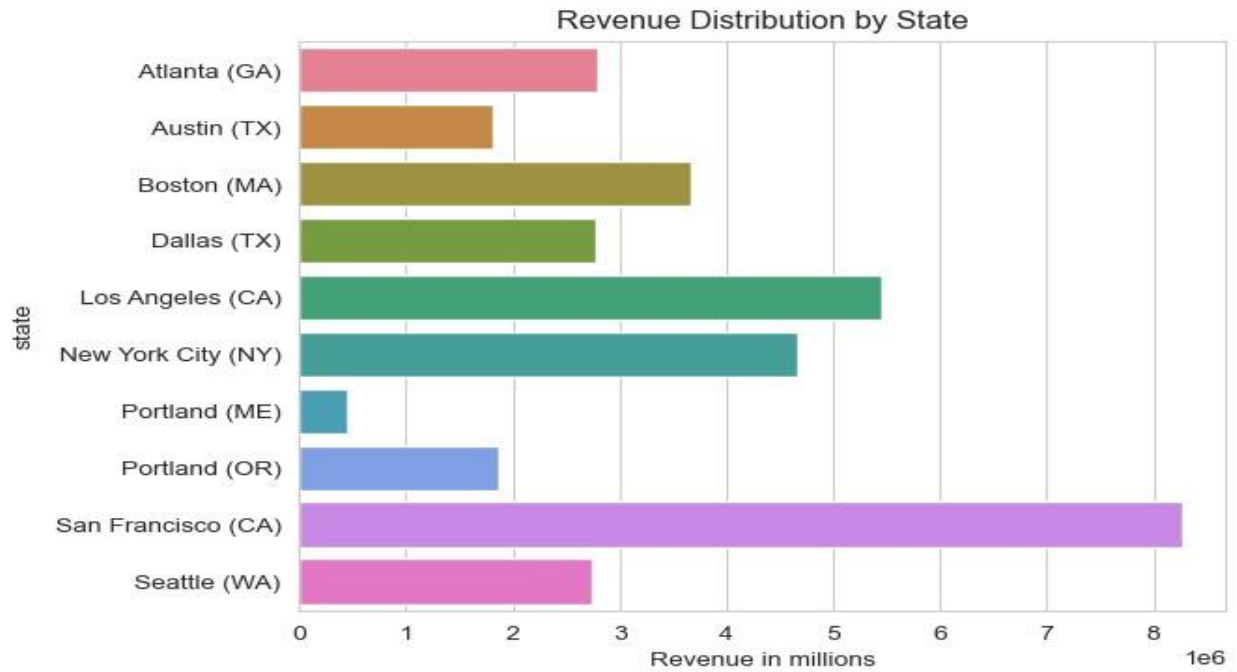
Key Insights:

- 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.