

Q1. Basic Data Exploration

Load the dataset and display:

- Total number of rows and columns
 - Number of missing values in each column
 - Data types of all columns
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Q2. Time Period & Transactions

Find:

1. The earliest and latest purchase dates.
 2. The total number of unique invoices.
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Q3. Revenue Calculation

Create a new column `TotalPrice = Quantity * UnitPrice`.

Then calculate:

- The total revenue generated
 - The average revenue per transaction
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Q4. Monthly Sales Trend

Group data by month and visualize the **total monthly revenue** using a **line chart**.

Q5. Top 10 Best-Selling Products

Find and visualize the **top 10 products by total revenue** using a **bar plot**.

Q6. Country-Wise Sales

Find the **top 5 countries** (excluding UK) that generated the most revenue.
Visualize the results with a **horizontal bar chart**.

Q7. Customer Behavior Analysis

Find:

1. Total number of unique customers
 2. Top 5 customers by total purchase amount
 3. Average spend per customer
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Q8. Month-on-Month Growth Rate

Using **NumPy**, calculate the **percentage growth rate** in monthly sales compared to the previous month.
Store and display the result in a new DataFrame.

Q9. Correlation Analysis

Find the correlation between **Quantity**, **UnitPrice**, and **TotalPrice**.
Visualize it using a **Seaborn heatmap**.

Q10. Returns or Cancellations Detection

Invoices starting with '**C**' indicate cancelled transactions.
Find:

1. The total number of cancelled invoices
2. The total value lost due to cancellations