📊 Retail Analytics Dashboard – Student Instructions

🗃️ Dataset Structure:

- **Stores**: Store_ID, Store_Name, Region
- **Products**: Product_ID, Product_Name, Category, Unit_Price
- **Sales**: Transaction_ID, Date, Store_ID, Product_ID, Units_Sold, Unit_Price, Total_Sale_Amount

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🧑‍💼 Business Context:

RetailHub is reviewing its performance across stores and products over the last two years. Leadership wants a Power BI dashboard that provides data-driven insights into **sales trends**, **product demand**, and **regional growth opportunities**.

🎯 Objectives for Students:

Create a multi-page Power BI report with the following components:

📄 Page 1: Executive Summary Dashboard

Visuals to Include:

- Total Sales (Card)
- Total Units Sold (Card)
- Avg Sale Value (Card)
- Sales by Region (Map or Donut Chart)
- Sales by Store (Bar Chart)
- Slicers: Region, Store, Date

🛒 Page 2: Product Performance Analysis

Visuals to Include:

- Sales by Product Category (Bar Chart)
- Top 10 Products by Revenue (Bar Chart)
- Units Sold vs Revenue by Category (Stacked Column)
- Matrix Table: Product-wise sales, price, units sold

📈 Page 3: Time Series & Trend Analysis

Visuals to Include:

- Monthly Sales Trend (Line Chart)
- Revenue per Store Over Time (Line or Area Chart)
- Seasonal Sales Patterns (Line/Column with Year-Month breakdown)
- Filters: Year, Month

🔍 Optional Page: Drill-down/Details

- Create a table with:
  - Date, Region, Store, Product, Category, Units Sold, Sale Amount
- Add slicers for user-driven deep dive

📌 KPIs & Measures to Create:

- `Total Revenue = SUM(Sales[Total_Sale_Amount])`
- `Avg Revenue per Transaction = AVERAGE(Sales[Total_Sale_Amount])`
- `Total Units Sold = SUM(Sales[Units_Sold])`
- `Transactions Count = COUNT(Sales[Transaction_ID])`

🧠 Student Deliverables:

1. A `.pbix` Power BI file with all visualizations
2. A 5-point insights summary answering:
   - Which region/store/product performed best?
   - Any seasonal or monthly sales trends?
   - What categories are most profitable?

Link for the dataset: Retail_analytics dataset