**Project name: Fashion ecommerce trends analysis (2020-2025)**

The process for creating a report in both Power BI and Tableau follows a similar workflow: data connection, data transformation, and visualization. The SQL queries you provided serve as the analytical roadmap for the report.

**1. Data Connection**

The first step is to import the data into your chosen tool.

* **In Power BI:**
  1. Open Power BI Desktop.
  2. From the "Home" tab, click "Get Data" and select "Text/CSV".
  3. Browse to and select the fashion\_ecom\_2020\_2025.csv file.
  4. Click "Load" to import the data.
* **In Tableau:**
  1. Open Tableau Desktop.
  2. From the "Connect" pane on the left, select "Text File."
  3. Browse to and select the fashion\_ecom\_2020\_2025.csv file.
  4. Tableau will automatically load the data and display it in the data source tab.

**2. Data Transformation and Modelling**

Before you can create visualizations, you may need to clean and prepare the data. The provided SQL queries offer a clear guide for the necessary transformations.

* **In Power BI (Power Query Editor):**
  1. After loading the data, a "Transform Data" button will appear. Click it to open the Power Query Editor.
  2. The order\_date column is a date string. You will need to convert this to a proper date data type. Select the column, go to the "Transform" tab, and change the data type to "Date."
  3. The revenue column may be formatted as text; ensure it is converted to a decimal number or currency type.
  4. Close and apply the changes to load the transformed data into the report.
* **In Tableau (Data Source Tab):**
  1. Tableau will likely recognize the data types automatically.
  2. If the order\_date column is not recognized as a date, click the data type icon next to its name and change it to "Date".
  3. Similarly, confirm that the revenue and price columns are set to a numerical data type.

**3. Report Visualization**

Using the SQL queries as a guide, you can create a series of visualizations to build a comprehensive report.

**Power BI & Tableau - Suggested Visualizations**

Based on the provided queries, here are the key charts to create for your report:

1. **Total Revenue Over the Years:** A line chart showing the total\_revenue by year. This can be a bar chart as well, as shown in the PowerPoint report.
2. **Monthly Revenue Trend:** A line chart to visualize the monthly\_revenue trend over the years.
3. **Top 5 Categories by Revenue:** A bar chart to display the top 5 product categories by total revenue.
4. **Orders by Sales Channel:** A bar chart or pie chart to show the total\_orders and total\_revenue for each sales channel.
5. **Average Order Value (AOV):** A single card or KPI visualization to display the average order value.
6. **Revenue by Country:** A map visualization to show the revenue contribution from each country.
7. **Revenue by Gender and Age:** A bar chart or stacked bar chart showing revenue segmented by customer\_gender and customer\_age group.
8. **Highest Selling Product Each Year:** A table or multi-line chart to show the highest selling product per year based on revenue.
9. **Returned Orders:** A card or KPI to show the total number of returned orders.