Assessment 1 : Marketing Intelligence Dashboard / Reporting

Context

You are given four datasets capturing **120 days of daily activity**:

- **Facebook.csv, Google.csv, TikTok.csv** → Campaign-level marketing data (date, tactic, state, campaign, impression, clicks, spend, attributed revenue).
- **Business.csv** → Daily business performance data (orders, new orders, new customers, total revenue, gross profit, COGS).

These datasets represent the marketing and business footprint of an e-commerce brand.

Task

Your job is to **design, build, and host an interactive BI dashboard** that helps a business stakeholder make sense of how marketing activity connects with business outcomes.

You are expected to:

- Explore and prepare the datasets (join, aggregate, derive metrics as needed).
- Decide which analyses, metrics, and visualizations matter most.
- Apply good principles of **data visualization and storytelling** so that insights are clear and actionable.
- Use your **product thinking** to determine what a decision-maker would want to see, not just what the data contains.

You are free to use any BI / visualization tool (e.g., Streamlit, Dash, Power BI, Tableau, Looker Studio, etc.).

What You Will Be Evaluated On

1. **Technical Execution**
    - Ability to clean, combine, and structure the data effectively.
    - Correctness and efficiency in handling joins, aggregations, and derived metrics.
2. **Visualization & Storytelling**
    - Quality of charts and dashboard layout.
    - Use of best practices (clarity, relevance, minimal clutter, appropriate chart choices).
    - Whether the dashboard tells a coherent story.

3. **Product Thinking**
    - Are you surfacing insights that a business or marketing leader would care about?
    - Do your choices reflect an understanding of how marketing and business data should interact?
    - Do you demonstrate curiosity by going beyond surface-level reporting?
4. **Delivery**
    - Speed of execution and ability to ship a working hosted dashboard.
    - Professionalism and usability of the final output.

Note

You are encouraged to leverage **LLMs** (ChatGPT, Claude, Gemini, etc.) to explore possible use cases of such datasets and to enrich your approach.

Deliverable: A hosted BI dashboard link (plus source file or repo if relevant).