**Adidas E-commerce Analysis using SQL**

**Problem Statement:**You are working as a data analyst at Adidas. Your task is to analyze retail sales performance across different product types, regions, and sales methods. Using the provided transactional data, your objective is to uncover trends in sales volume, profit margins, and product performance to support data-driven decisions in marketing and inventory management.

**Tasks to be Performed:**

1. Clean and preprocess the dataset using SQL functions to remove currency symbols, convert strings to numeric types, and standardize date formats.
2. Use CTEs and window functions to analyze sales trends over time and rank top-performing products by revenue and profit.
3. Write subqueries to calculate average unit price, total units sold, and profit margins across product categories and states.
4. Use aggregation and grouping to compare total sales, units sold, and operating profit across cities and sales methods.
5. Apply filtering and joins (if other tables exist) to examine regional sales patterns and performance in different product lines.

**Dataset**

Link- [[Dataset](https://docs.google.com/spreadsheets/d/1KakQCOxtOK62uS6RCIHF-f2dsc346SEp/edit?usp=sharing&ouid=107726465846723228361&rtpof=true&sd=true)]

| **Attribute** | **Description** |
| --- | --- |
| Retailer | Name of the retailer (e.g., Foot Locker) |
| Retailer ID | Unique identifier for the retailer |
| Invoice Date | Date of the transaction |
| Region | Geographic region of the sale (e.g., Northeast) |
| State | State where the transaction occurred |
| City | City where the transaction occurred |
| Product | Description of the product sold |
| Price per Unit | Price for a single unit of the product |
| Units Sold | Number of product units sold |
| Total Sales | Total revenue generated from the sale |
| Operating Profit | Profit after subtracting operational costs |
| Operating Margin | Profit as a percentage of total sales |
| Sales Method | Method of sale (e.g., In-store, Outlet, Online) |

**Submission Guidelines:**

1. Create a word document that contains all the findings with introduction and summary.
2. Attach the code and the screenshot of the o/p with a few descriptions of the o/p in the document.