SQL PROJECT: ECOMMERCE

# INTRODUCTION

In this mini project you will be writing queries to analyze a chain of Ecommerce data. The queries will cover the range of SQL you have learnt in class including advanced queries.

# Database file: DATABASEFILE.SQL

**CREATE THE DATABASE ON YOUR COMPUTER USING THE APPROPRIATE COMMANDS. FOLLOW THE PROMPTS IN THE FILE.**

THEN ANSWER THE FOLLOWING:

**QUESTIONS**

Adapt the questions to the fields you have in the database, the questions are scenario based and requires that you explore the database and tables you are given in the file mentioned above.

1. Total Sales by Employee:

- Write a query to calculate the total sales (in dollars) made by each employee, considering the quantity and unit price of products sold.

2. Top 5 Customers by Sales:

- Identify the top 5 customers who have generated the most revenue. Show the customer’s name and the total amount they’ve spent.

3. Monthly Sales Trend:

- Write a query to display the total sales amount for each month in the year 1997.

4. Order Fulfilment Time:

- Calculate the average time (in days) taken to fulfil an order for each employee. Assuming shipping takes 3 or 5 days respectively depending on if the item was ordered in 1996 or 1997.

5. Products by Category with No Sales:

- List the customers operating in London and total sales for each.

6. Customers with Multiple Orders on the Same Date:

- Write a query to find customers who have placed more than one order on the same date.

7. Average Discount per Product:

- Calculate the average discount given per product across all orders. Round to 2 decimal places.

8. Products Ordered by Each Customer:

- For each customer, list the products they have ordered along with the total quantity of each product ordered.

9. Employee Sales Ranking:

- Rank employees based on their total sales. Show the employeename, total sales, and their rank.

10. Sales by Country and Category:

- Write a query to display the total sales amount for each product category, grouped by country.

11. Year-over-Year Sales Growth:

- Calculate the percentage growth in sales from one year to the next for each product.

12. Order Quantity Percentile:

- Calculate the percentile rank of each order based on the total quantity of products in the order.

13. Products Never Reordered:

- Identify products that have been sold but have never been reordered (ordered only once).

14. Most Valuable Product by Revenue:

- Write a query to find the product that has generated the most revenue in each category.

15. Complex Order Details:

- Identify orders where the total price of all items exceeds $100 and contains at least one product with a discount of 5% or more.

**SUBMISSION**

Submit your SQL file showing your queries in a zip file with your full name.

Attach a doc or POWERPOINT file showing the results of each query. If the result is too long, a screenshot is fine.

**DURATION**

2 WEEKS FROM DATE POSTED.