**TDI STRUCTURED QUERY LANGUAGE (SQL) PROJECT WEEK TWO**

**Project: Basic Syntax, Aggregate functions and querying and sorting**

Scenario:

You are tasked with creating a sales table. The table must store information about SaleID, ProductID, CustomerID, SaleDate DATE, Quantity, UnitPrice

After which you are expected to move to part C for submission mode and part D for details for correction classes.

PART A

RESOURCES

Link 1: <https://youtu.be/jcoJuc5e3RE?si=I1gckh2QeecS_nxO>

Link 2: <https://youtu.be/nNrgRVIzeHg?si=J7Q54lPzMqiOtOAM>

Link3: <https://youtu.be/MARn_mssG4A?si=FFENmwRUowWM5Jei>

Link 4: <https://youtu.be/4Uv0o8IBqw0?si=8xMxeh0W237KptYu>

PART B

QUESTIONS

1.Write a query to select all columns from the `Sales` table.

2. Write a query to find all sales where the `Quantity` is greater than 10.

3. Write a query to find all sales where the `Quantity` is greater than 10 and the `UnitPrice` is greater than 20.

4. Write a query to find all sales where the `Quantity` is greater than 10 or the `UnitPrice` is greater than 20.

5. Write a query to select all columns from the `Sales` table and order the results by `SaleDate` in ascending order.

6. Write a query to select all columns from the `Sales` table and order the results by `UnitPrice` in descending order.

7. Write a query to group the sales by `ProductID` and calculate the total quantity sold for each product.

8. Write a query to group the sales by `ProductID` and find products that have sold more than 100 units in total.

9. Write a query to count the number of sales that occurred for each product.

10. Write a query to calculate the total revenue (Quantity UnitPrice) for each product.

11. Write a query to calculate the average `UnitPrice` for each product.

12. Write a query to find the minimum `UnitPrice` for each product.

13. Write a query to find the maximum `UnitPrice` for each product.

14. Write a query to find all sales where the `Quantity` is greater than 5 and the `SaleDate` is in the year 2023.

15. Write a query to select all columns from the `Sales` table and order the results by `ProductID` and then by `SaleDate` in ascending order.

16.Write a query to group the sales by `CustomerID` and find customers who have made purchases worth more than $500 in total.

17. Write a query to group the sales by `ProductID` and count the number of sales for each product where the total number of sales is more than 50.

18. Write a query to calculate the total revenue for sales where the `UnitPrice` is greater than 15.

19. Write a query to group the sales by `ProductID` and calculate the average `Quantity` sold for each product.

20. Write a query to select `ProductID`, count the number of sales, and calculate the total revenue for each product. Only include products that have more than 20 sales and order the results by total revenue in descending order.

**PART C**

**SUBMISSION MODE**

You are expected to submit your assignment a week after it was given, with this, Submission starts from Friday 7am Nigerian time to Saturday 3pm Nigerian time.

This submission will be done either on Twitter or LinkedIn, you can choose either of the two to submit your assignment or you can submit on both platforms. You would take a screenshot of your work Answers, you can add a write up if you want.

For twitter Submission, you would tag:

1. The TDI Official page @TDataInitiative
2. Annie @ DabereNnamnai
3. The project coordinator @The\_Jonathaan
4. Tag @SQLServer
5. Use the #TDI

For LinkedIn Submission, you would tag:

1. TDI page @TheData Initiative
2. Annie @ Anne Nnamani

**PART D**

**CORRECTION CLASS**

Correction Classes, holds every Saturday, 4pm-6pm Nigerian time.

Venue: The TDI official Discord page or a google meet link will be sent.