**TDI STRUCTURED QUERY LANGUAGE WEEK 4**

Introduction

Welcome to SQL Week 4!

In this assignment, you will delve into the crucial concepts of SQL text functions, which are essential for manipulating and formatting text data within your databases. Understanding how to use these functions will allow you to transform and analyze text data more effectively. This week, you will be using a sales dataset to practice applying various text functions in SQL. You will also combine these functions with aggregate functions, GROUP BY, ORDER BY, and WHERE clauses to extract meaningful insights from your data.

PART A

Resources

LINK 1: <https://youtu.be/GQj6_6V_jVA?si=53wr3EWJ9fI6dP3i>

LINK 2: <https://youtu.be/3SdK511aK54?si=gf-O8pa0eyL3X0Sy>

LINK 3: <https://youtu.be/vN4sy5nHn6k?si=l44f8r2iEGnsI9dJ>

PART B

Questions:

1. Convert all customer names to lowercase and display the result, ordering by the lowercase customer name.

2. Convert all customer names to uppercase and display the total sales for each customer, grouped by the uppercase name.

3. Concatenate the customer name and city with a comma and space between them, and order the results by the combined string.

4. Extract the first three characters of the customer names and display the result, ordering by the substring.

5. Get the first five characters of the customer names and calculate the total sales for these grouped names.

6. Get the last three characters of the customer names and display the result, ordering by the last three characters.

7. Replace all spaces in customer names with underscores and calculate the total quantity of items ordered by each modified name, ordering by the replaced names.

8. Find the length of each customer name and display the result, ordering by the length.

9. Remove leading and trailing spaces from customer names (if any) and display the result, ordering by the trimmed names.

10. Remove leading spaces from customer names and display the result where the customer name starts with 'A', ordering by the trimmed names.

11. Remove trailing spaces from customer names and display the result where the length of the customer name is greater than 10, ordering by the trimmed names.

12. Display customer names, replacing NULL values with 'Unknown', and order by the coalesced customer names.

**PART C**

**SUBMISSION MODE**

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