**TDI POWER BI WEEK 3 PROJECT**

The Following Resources will help you understand Dax in Power BI using the data you cleaned from your last task:

After which you are expected to move to part B and answer the questions, part C for submission mode and part D for details for correction classes.

PART A

RESOURCES:

LINK 1: <https://youtu.be/waG_JhBgUpM?si=0N6AijHs1-l8xaru>

LINK2: <https://youtu.be/vcijg0gUXSg?si=yARof2-WlsPqq8KK>

LINK 3: <https://www.youtube.com/live/QJw4HkagVWc?si=gMRqtVgxU93JJiYR>

PART B

QUESTIONS:

Creating Measures using DAX

1. Write a DAX formula to create a measure that calculates the total sales amount from the 'order\_details' table, where the 'quantity' column is multiplied by the 'price' column from the 'pizzas' table.

2. Create a measure to calculate the average order value from the 'order\_details' and 'orders' tables.

3. How would you create a measure to calculate the total number of pizzas sold from the 'order\_details' table?

4. Write a DAX measure that calculates the total revenue for each type of pizza using the 'pizza\_types' and 'order\_details' tables.

Understanding Row Context and Filter Context

5. Describe filter context and explain how it affects the calculation of a measure that sums the total quantity of pizzas ordered in the 'order\_details' table for a specific date range in the 'orders' table.

6. Explain how row context is applied when creating a calculated column that multiplies 'quantity' by 'price' in the 'order\_details' table.

7. How does the CALCULATE function change the filter context of a measure? Provide an example using the dataset.

8. Describe a scenario where you would use the ALLEXCEPT function in your DAX calculations.

Common DAX Functions

9. Name and describe the purpose of at least three common DAX functions that you would use to perform calculations or data manipulations on the 'orders' and 'order\_details' tables.

10. How does the RELATED function work and when would you use it with the 'order\_details' and 'pizzas' tables?

11. Write a DAX formula to create a measure that counts the number of distinct orders in the 'orders' table.

12. What is the difference between the SUM and SUMX functions in DAX? Provide an example of each using the dataset.

Time Intelligence Functions in DAX

13. What are time intelligence functions in DAX and why are they important?

14. Explain how the TOTALYTD function works and provide a DAX example using it to calculate the year-to-date total sales amount from the 'order\_details' and 'orders' tables.

15. How can you use the DATEADD function to create a measure that calculates sales growth compared to the previous year?

**PART C**

**SUBMISSION MODE**

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