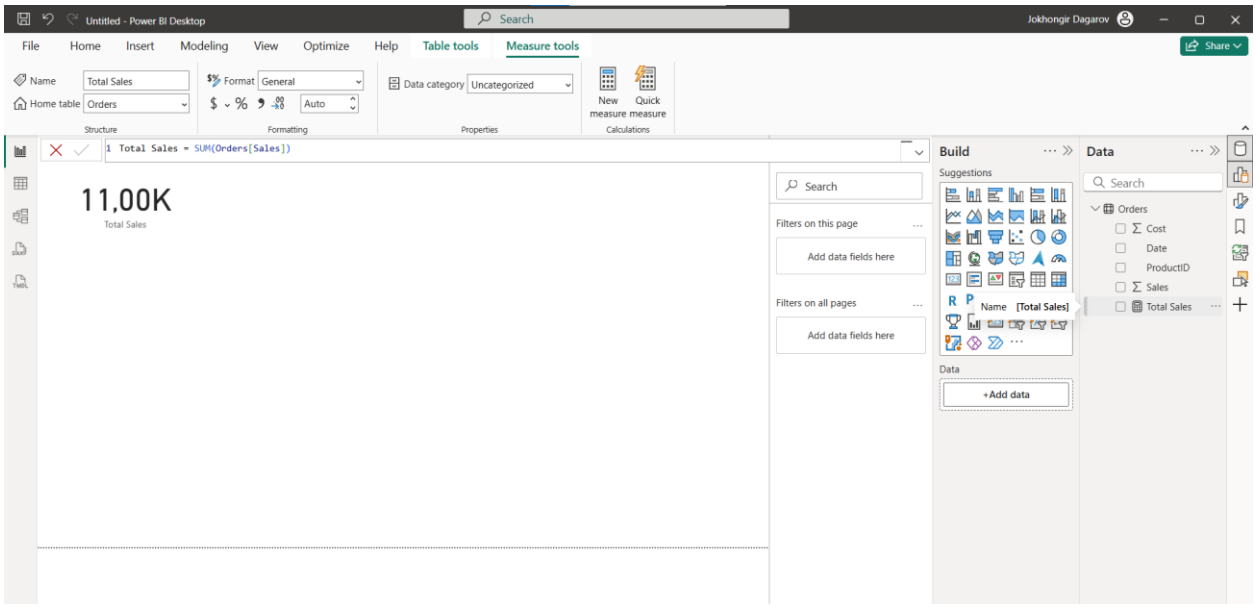
1. What does DAX stand for?

DAX = *Data Analysis Expressions* — a formula language used in Power BI, Power Pivot, and SSAS Tabular models.

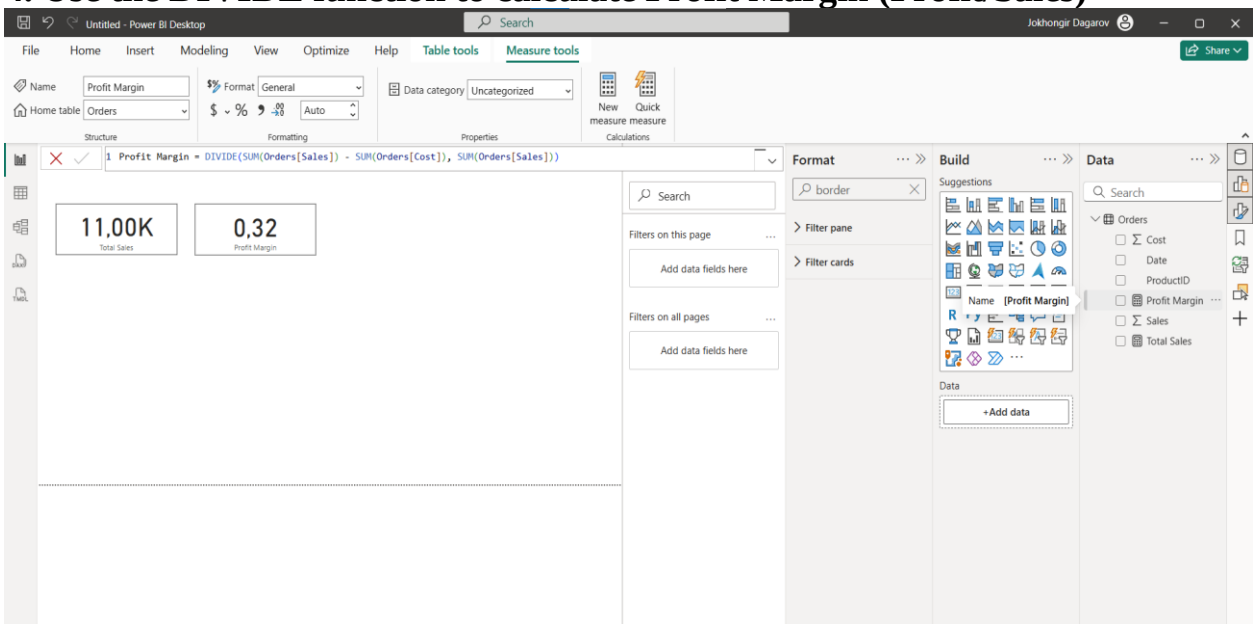
2. Write a DAX formula to sum the Sales column



3. What is the difference between a calculated column and a measure?

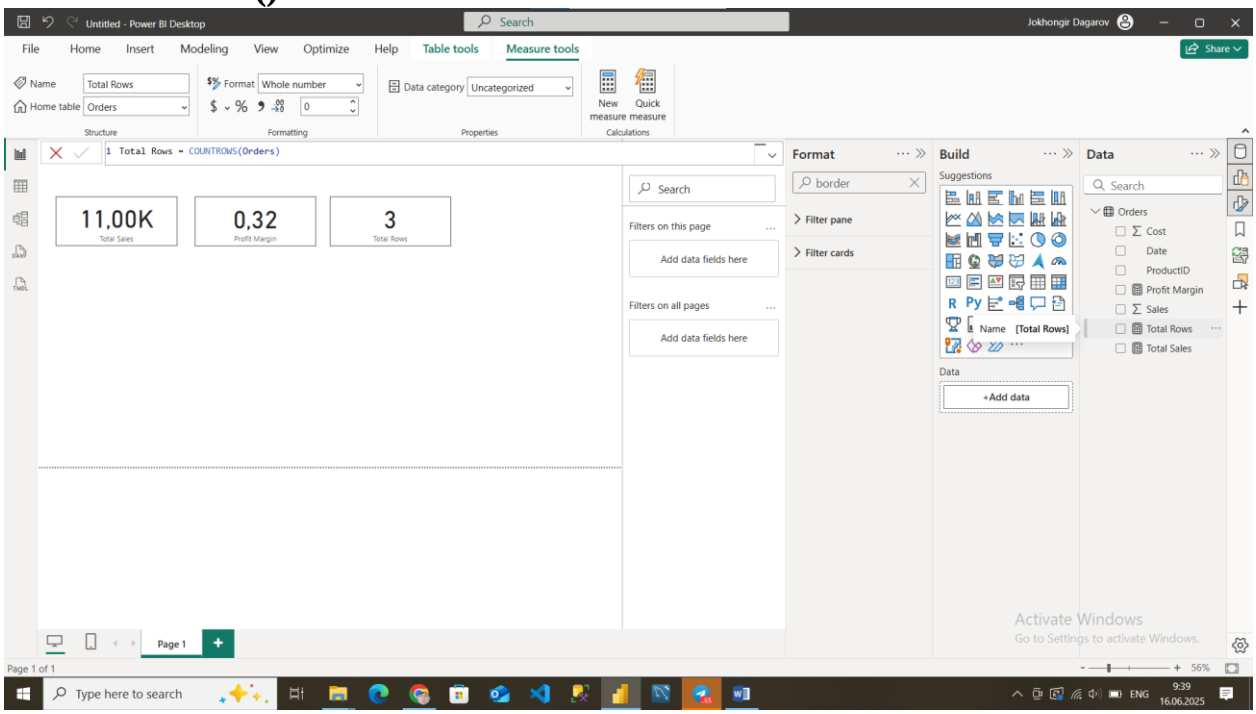
Calculated Column	Measure
Calculated row-by-row when data loads	Calculated dynamically based on visuals and context
Stored in the data model (uses memory)	Computed on demand (more efficient)
Adds a new column in the table	Doesn't create a column; only shown in visuals
Has **row context**	Has **filter context**

4. Use the DIVIDE function to calculate Profit Margin (Profit/Sales)

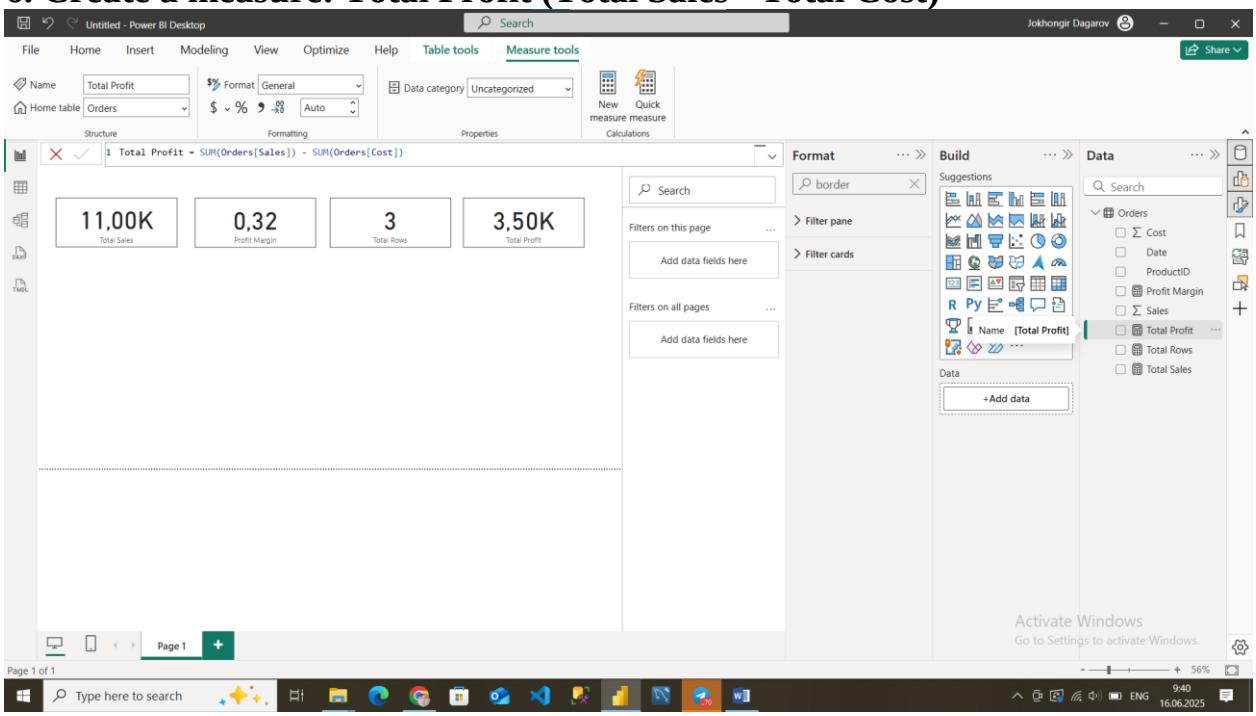


5. What does COUNTROWS() do in DAX?

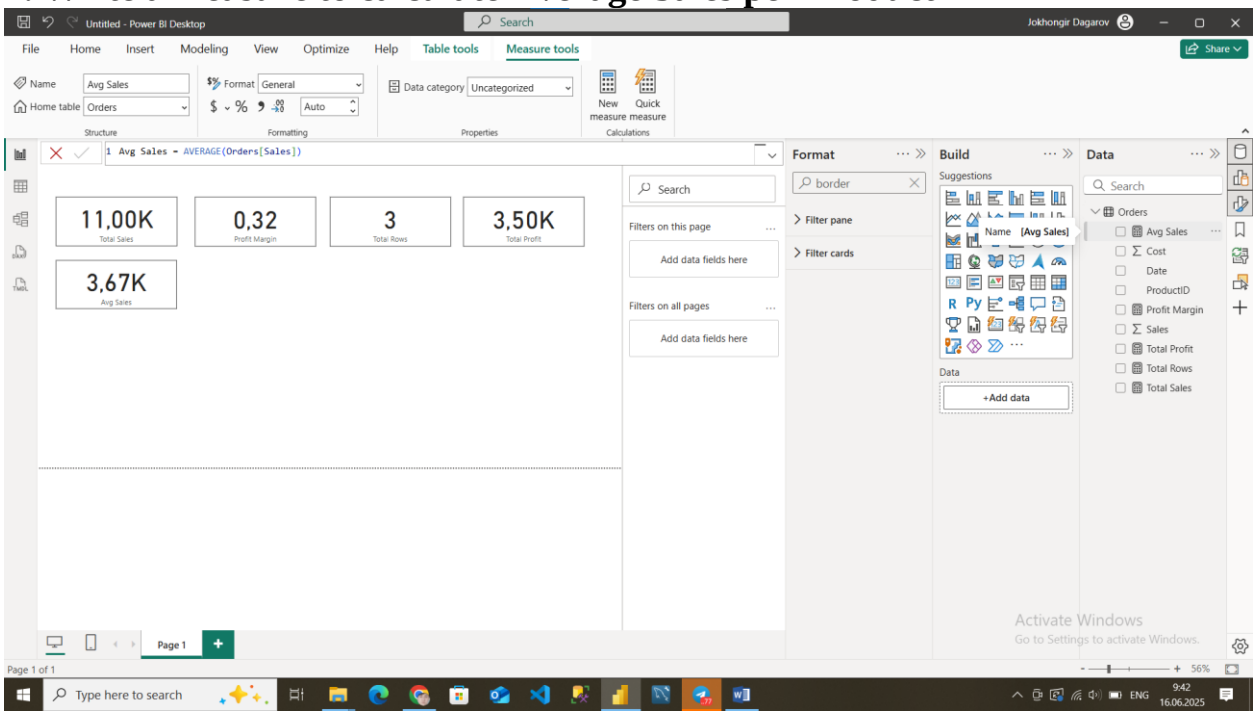
COUNTROWS() counts the number of rows in a table.



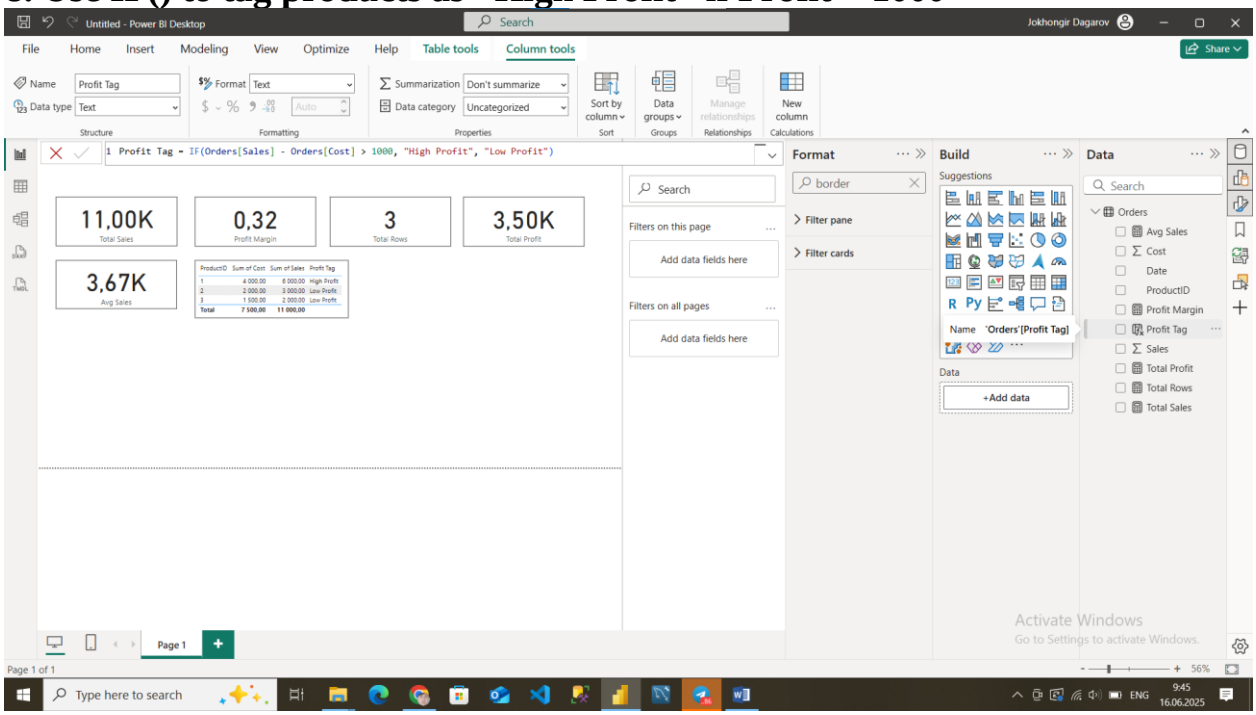
6. Create a measure: Total Profit (Total Sales - Total Cost)



7. Write a measure to calculate Average Sales per Product



8. Use IF() to tag products as "High Profit" if Profit > 1000



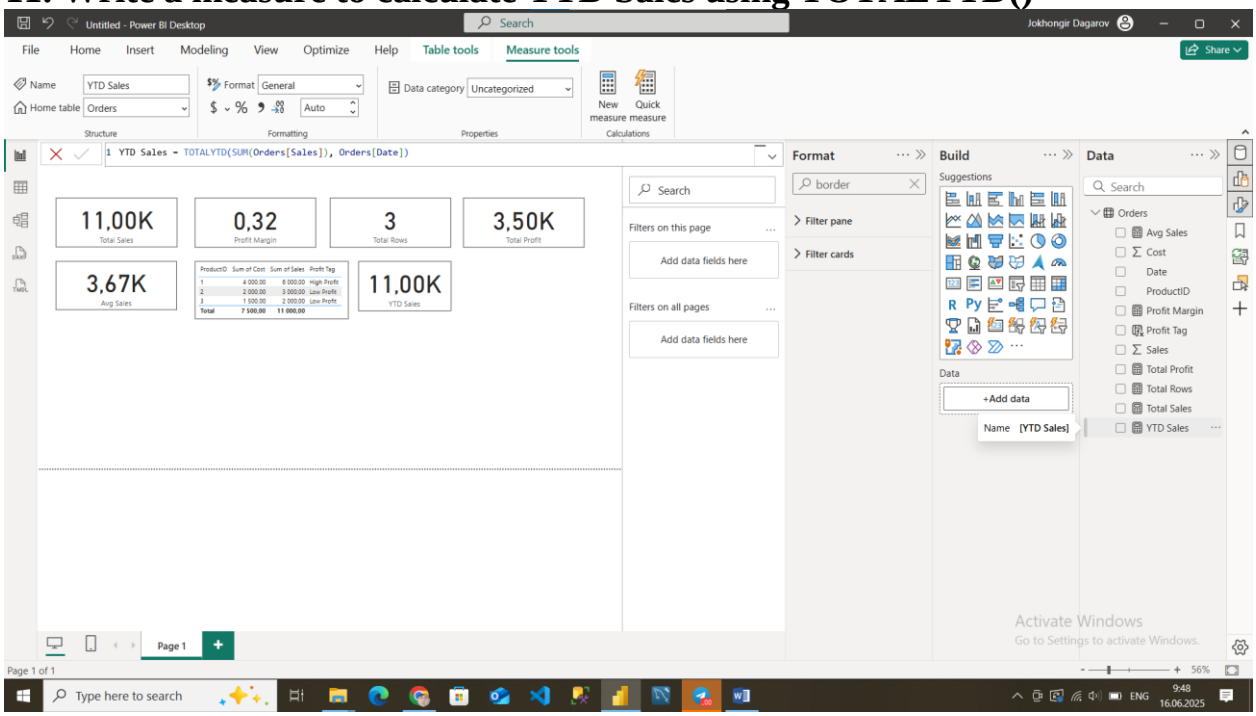
9. What is a circular dependency error in a calculated column?

Occurs when a calculated column directly or indirectly depends on itself in its formula, creating an endless calculation loop that DAX cannot resolve.

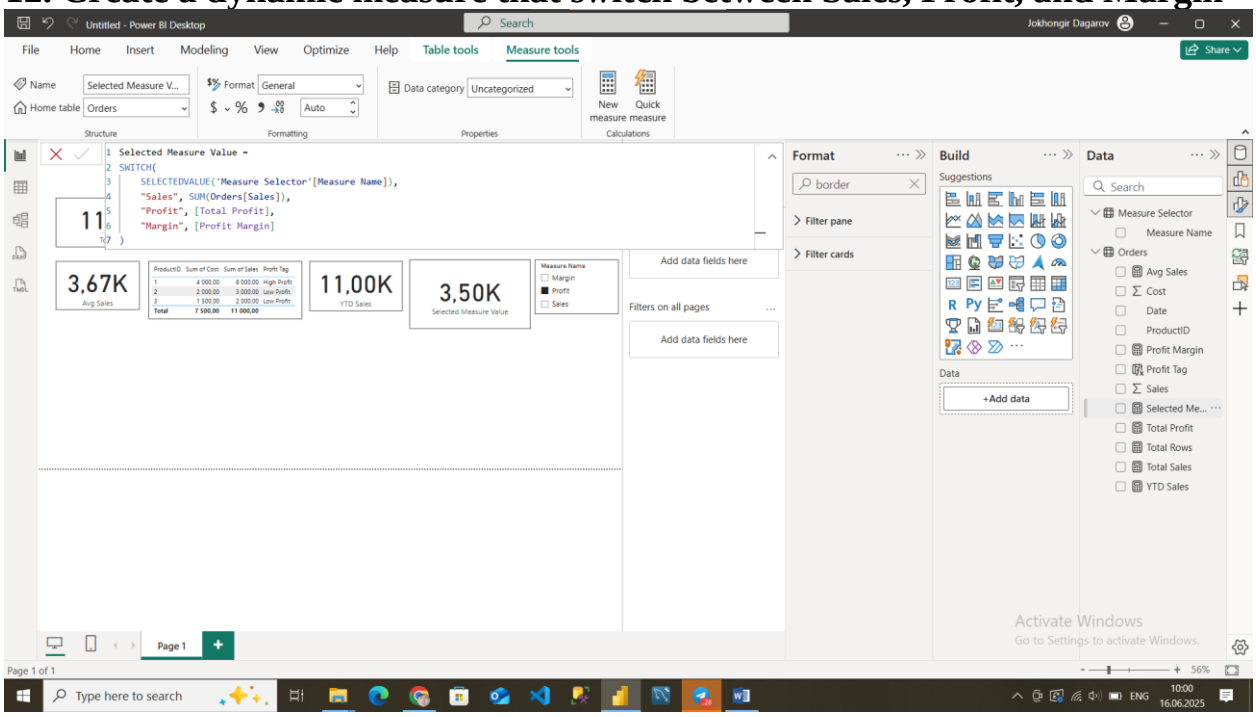
10. Explain row context vs. filter context

Row Context	Filter Context
Operates row-by-row in a calculated column or iterator	Comes from report filters, slicers, or CALCULATE() functions

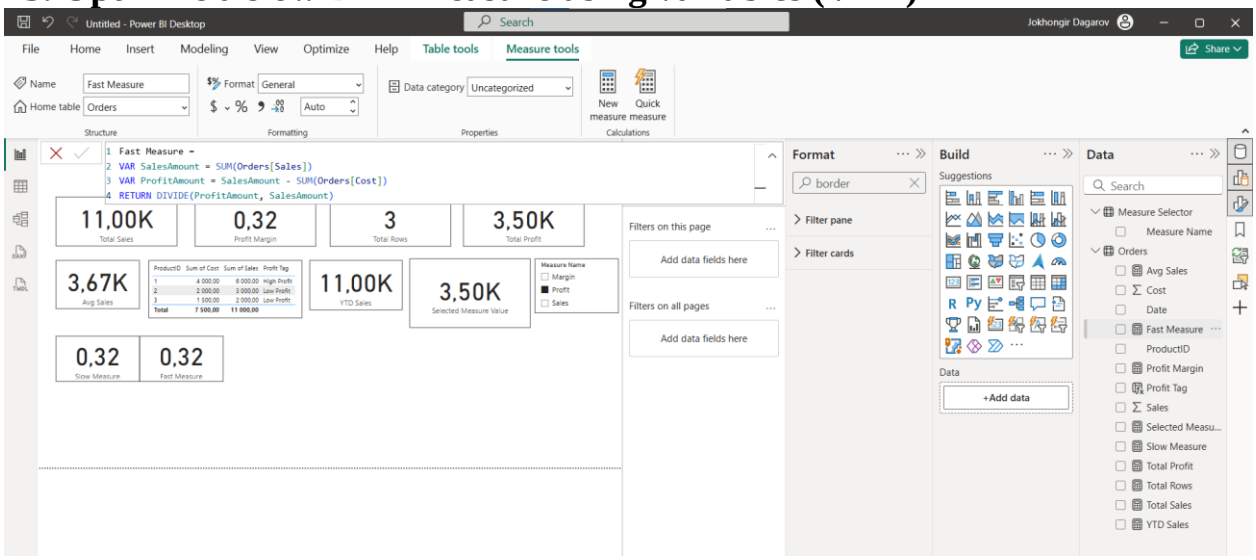
11. Write a measure to calculate YTD Sales using TOTALYTD()



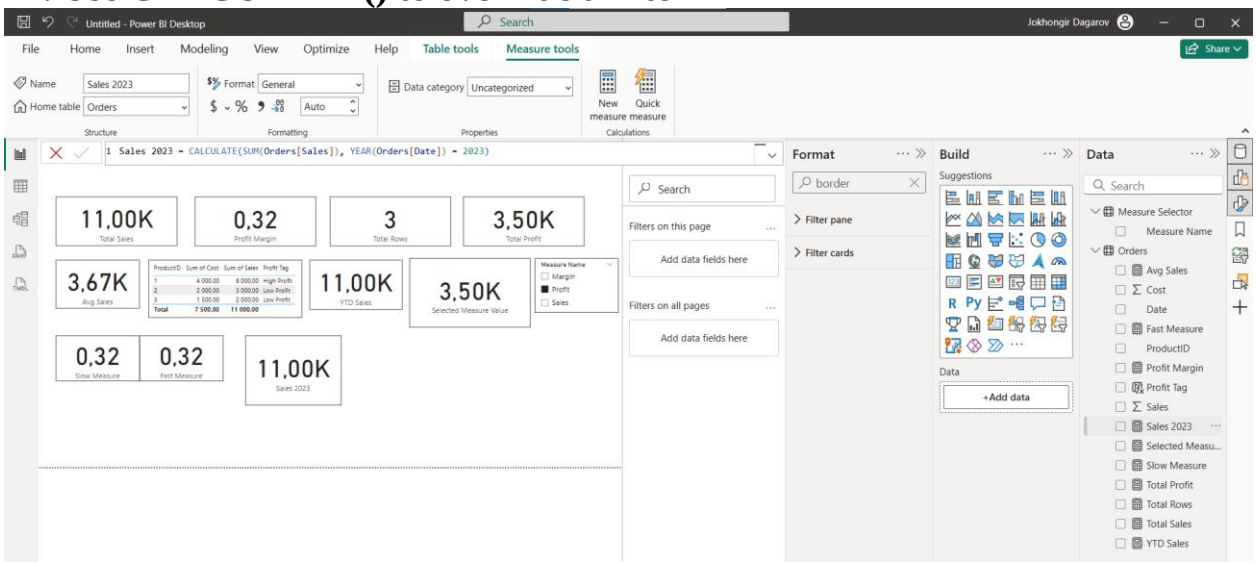
12. Create a dynamic measure that switch between Sales, Profit, and Margin



13. Optimize a slow DAX measure using variables (VAR)



14. Use CALCULATE() to override a filter



15. Write a measure that returns the highest sales amount