

1. What does

`FILTER(Sales, Sales[Amount] > 1000)`

return?

It returns a **table** containing only the rows where `Amount > 1000`.

2. High Sales Measure

The screenshot shows the Power BI Desktop interface. The 'Measure tools' ribbon is active. The 'Name' field is set to 'High Sales'. The 'Format' field is set to 'Whole number'. The 'Data category' is set to 'Uncategorized'. The 'Structure' pane shows the measure definition:

```
1 High Sales =  
2 CALCULATE(  
3     SUM(Sales[Amount]),  
4     FILTER(Sales, Sales[Amount] > 1000)  
5 )
```

The 'Data' pane shows the results of the measure:

High Sales	ProductID	Region	SaleDate
1200	P1	North	5 мая 2023 г.
1500	P1	North	15 мая 2023 г.
2700			

The 'Format' pane shows the 'Filter pane' and 'Filter cards' sections. The 'Build' pane shows the 'Name' field set to 'High Sales'. The 'Data' pane shows the 'Sales' table with columns: Amount, ProductID, Region, SaleDate, and SaleID.

3. ALLEXCEPT vs. ALL

ALLEXCEPT(Sales, Sales[Region])	ALL(Sales)
Removes all filters except for Region .	Removes all filters on the Sales table.
Keeps Region context active.	Ignores every filter from visuals, slicers, etc.

4. Categorize Amount with SWITCH

The screenshot shows the Power BI Desktop interface. The 'Column tools' ribbon is active. The 'Name' field is set to 'Sales Category'. The 'Format' field is set to 'Text'. The 'Data type' is set to 'Text'. The 'Structure' pane shows the measure definition:

```
1 Sales Category =  
2 SWITCH(  
3     TRUE(),  
4     Sales[Amount] > 1000, "High",  
5     Sales[Amount] >= 500 && Sales[Amount] <= 1000, "Medium",  
6     "Low"  
7 )
```

The 'Data' pane shows the results of the measure:

SaleID	ProductID	Amount	Region	SaleDate	Sales Category
1	P1	1200	North	5 мая 2023 г.	High
2	P2	800	South	10 мая 2023 г.	Medium
3	P1	1500	North	15 мая 2023 г.	High
4	P2	600	East	20 мая 2023 г.	Medium

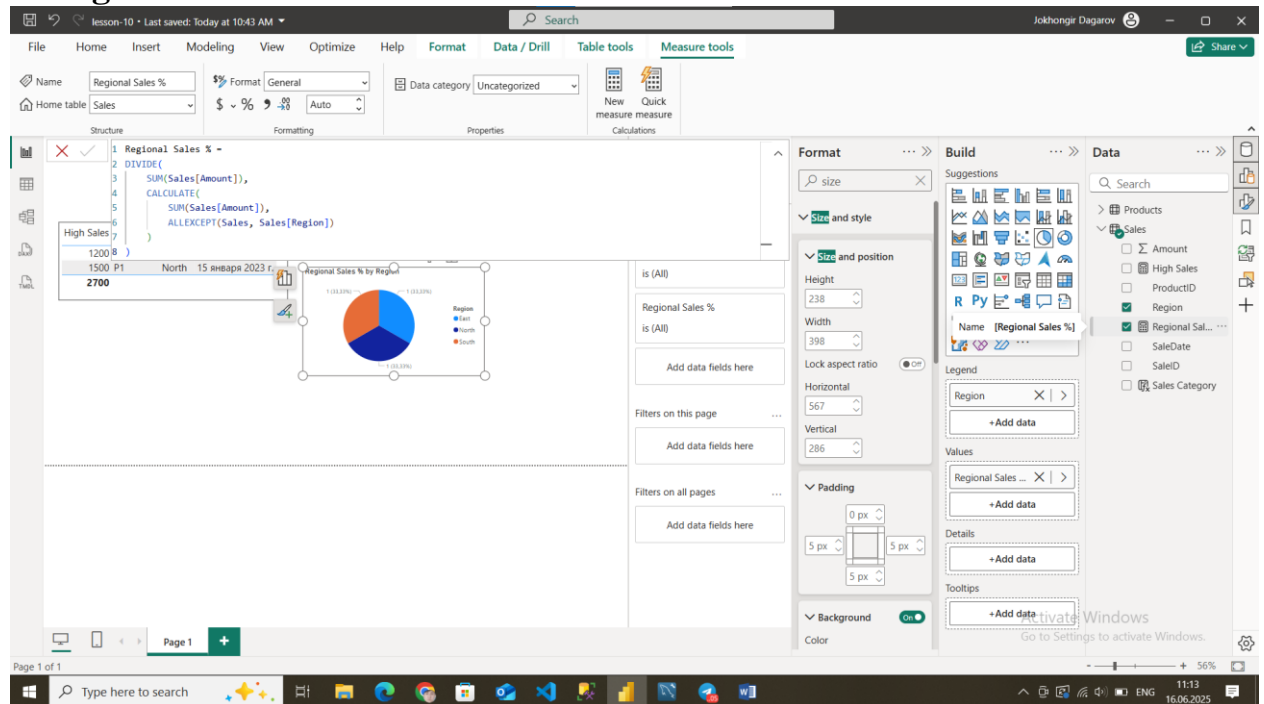
The 'Table: Sales (4 rows) Column: Sales Category (2 distinct values)' is shown at the bottom.

5. Purpose of ALLSELECTED

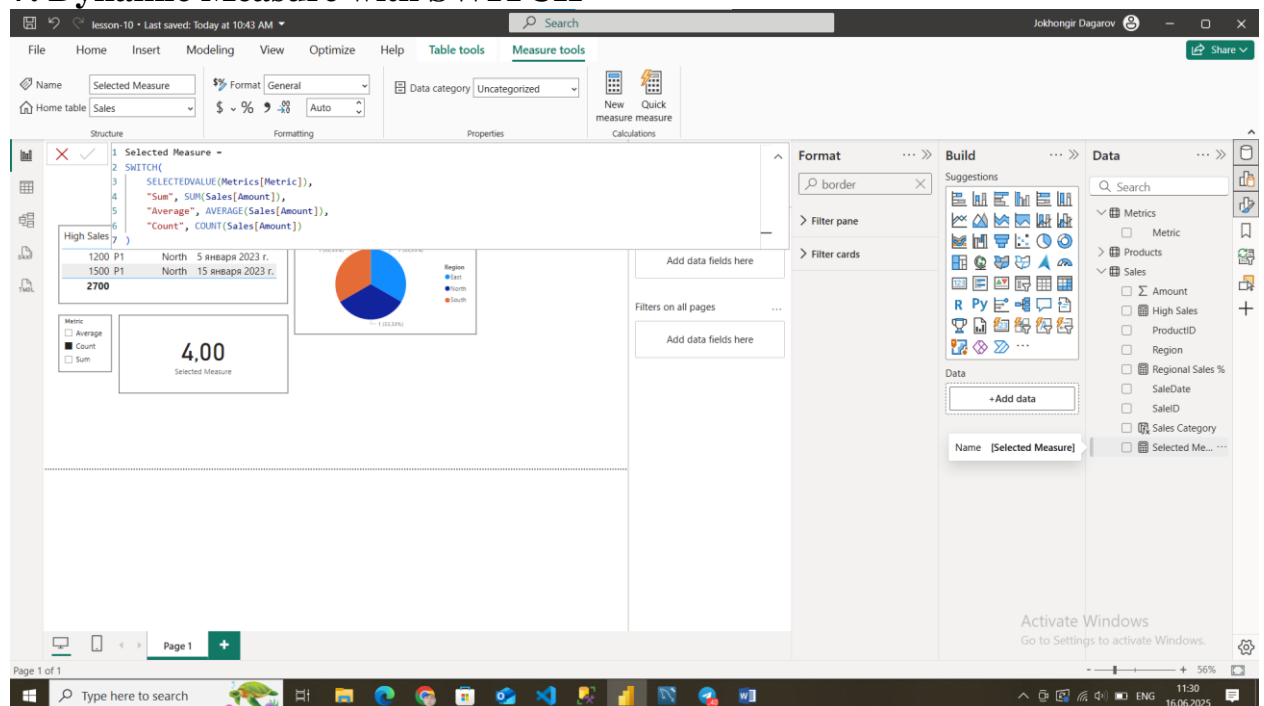
Returns all values visible based on slicers and filters applied outside the current visual.

Useful in percentage-of-total calculations when you want to respect slicers but not the individual matrix or card filters.

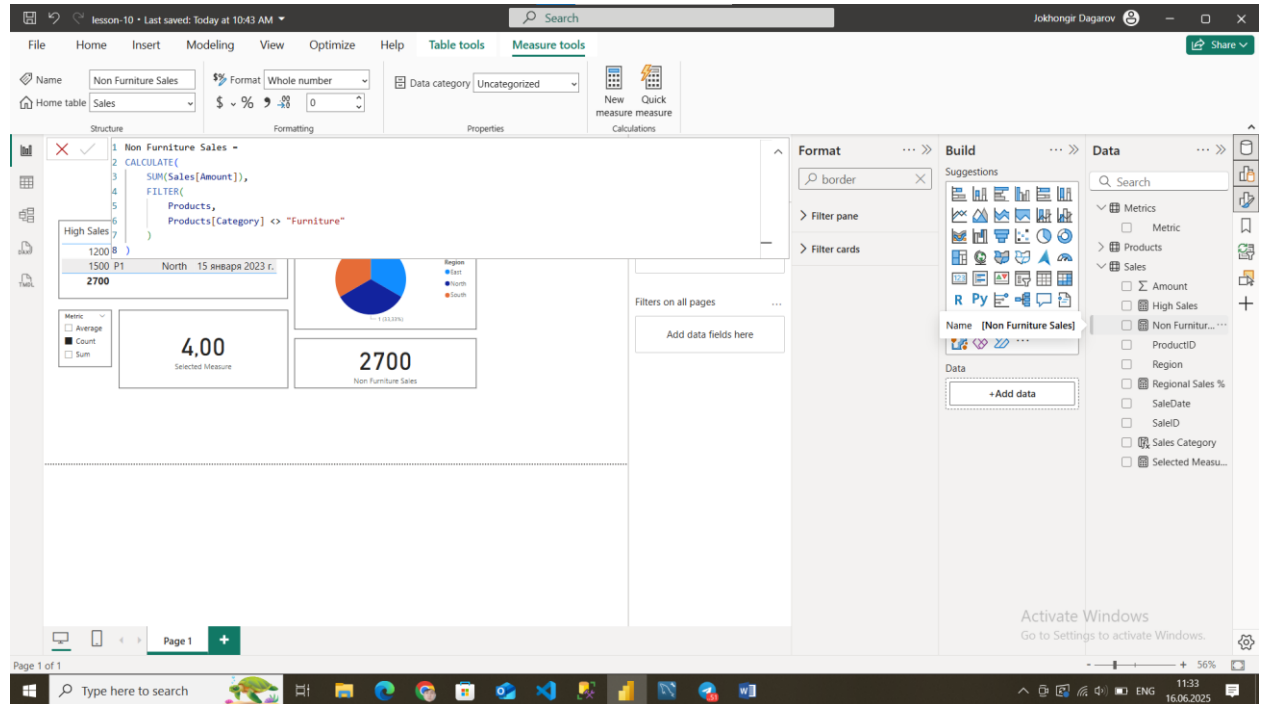
6. Regional Sales % Measure



7. Dynamic Measure with SWITCH



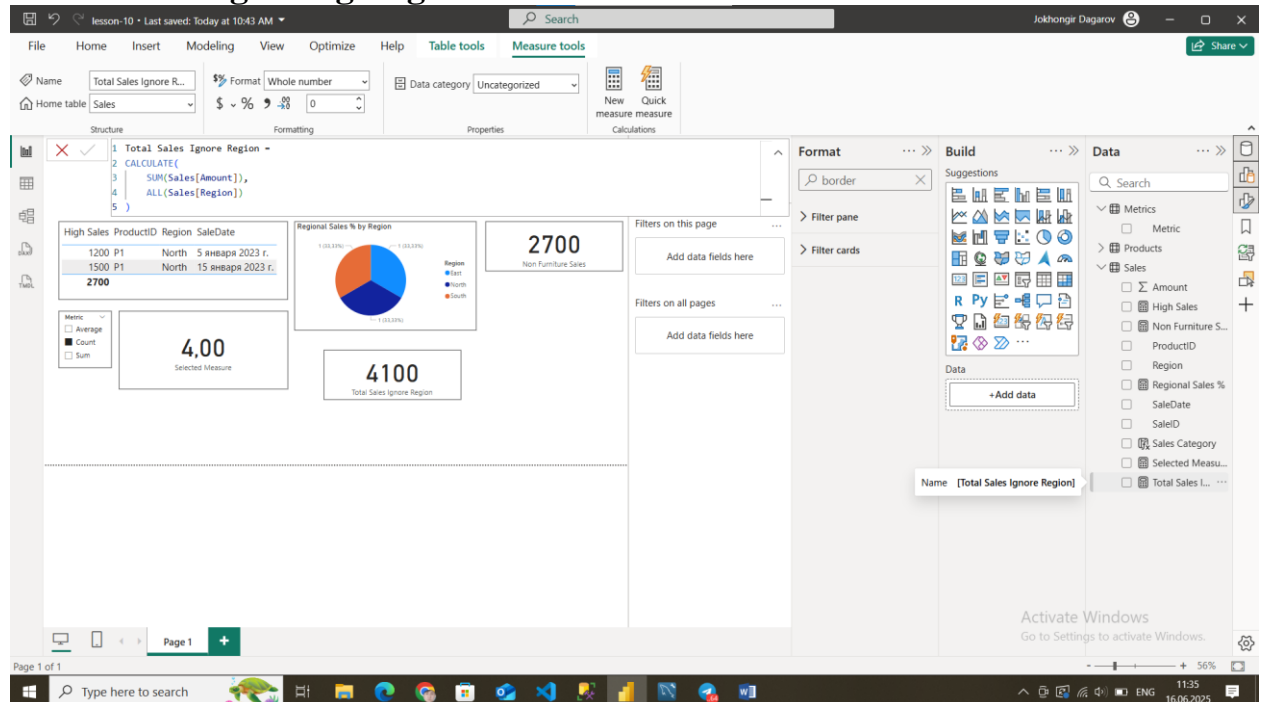
8. Exclude "Furniture" Sales



9. Why ALLSELECTED Might Behave Unexpectedly

In pivot tables, **ALLSELECTED** depends on slicers and context outside the visual. If multiple slicers interact or no slicer exists, the result might not match expectations because it includes only visible (selected) data at the report level — not necessarily the matrix's full total.

10. Measure Ignoring Region Filter



11. Optimize High Sales (Boolean Filter)

The screenshot shows the Power BI Desktop interface with the 'Measure tools' tab selected. The 'Name' property is set to 'High Sales Optimized'. The 'Home table' is 'Sales'. The 'Format' property is set to 'Whole number'. The 'Data category' is 'Uncategorized'. The 'Measure' property is set to 'Sum'. The 'Visualizations' pane shows a table, a pie chart, and three cards. The table shows 'High Sales' with columns 'ProductID', 'Region', and 'SaleDate'. The pie chart shows 'Regional Sales % by Region'. The cards show '2700' (Non Furniture Sales), '4100' (Total Sales Ignore Region), and '2700' (High Sales Optimized). The 'Filters on this page' pane is empty. The 'Filters on all pages' pane is empty. The 'Format' pane shows 'border' selected. The 'Build' pane shows 'High Sales Optimized' selected. The 'Data' pane shows 'High Sales Optimized' selected. The 'Visualizations' pane shows a table, a pie chart, and three cards. The table shows 'High Sales' with columns 'ProductID', 'Region', and 'SaleDate'. The pie chart shows 'Regional Sales % by Region'. The cards show '2700' (Non Furniture Sales), '4100' (Total Sales Ignore Region), and '2700' (High Sales Optimized). The 'Filters on this page' pane is empty. The 'Filters on all pages' pane is empty. The 'Format' pane shows 'border' selected. The 'Build' pane shows 'High Sales Optimized' selected. The 'Data' pane shows 'High Sales Optimized' selected.

```
1 High Sales Optimized =  
2 CALCULATE(  
3     SUM(Sales[Amount]),  
4     Sales[Amount] > 1000  
5 )
```

High Sales	ProductID	Region	SaleDate
1200	P1	North	5 января 2023 г.
1500	P1	North	15 января 2023 г.
2700			

4,00
Selected Measure

Regional Sales % by Region

2700
Non Furniture Sales

4100
Total Sales Ignore Region

2700
High Sales Optimized

12. Top 2 Products

The screenshot shows the Power BI Desktop interface with the 'Measure tools' tab selected. The 'Name' property is set to 'Top 2 Products Sales'. The 'Home table' is 'Sales'. The 'Format' property is set to 'Whole number'. The 'Data category' is 'Uncategorized'. The 'Measure' property is set to 'Sum'. The 'Visualizations' pane shows a table, a pie chart, and three cards. The table shows 'High Sales' with columns 'ProductID', 'Region', and 'SaleDate'. The pie chart shows 'Regional Sales % by Region'. The cards show '4100' (Total Sales Ignore Region), '2700' (High Sales Optimized), and '4,00' (Selected Measure). The 'Filters on this page' pane is empty. The 'Filters on all pages' pane is empty. The 'Format' pane shows 'border' selected. The 'Build' pane shows 'Top 2 Products Sales' selected. The 'Data' pane shows 'Top 2 Products Sales' selected.

```
1 Top 2 Products Sales =  
2 CALCULATE(  
3     SUM(Sales[Amount]),  
4     TOPN(  
5         2,  
6         VALUES(Sales[ProductID]),  
7         CALCULATE(SUM(Sales[Amount])),  
8         DESC  
9     )  
10 )
```

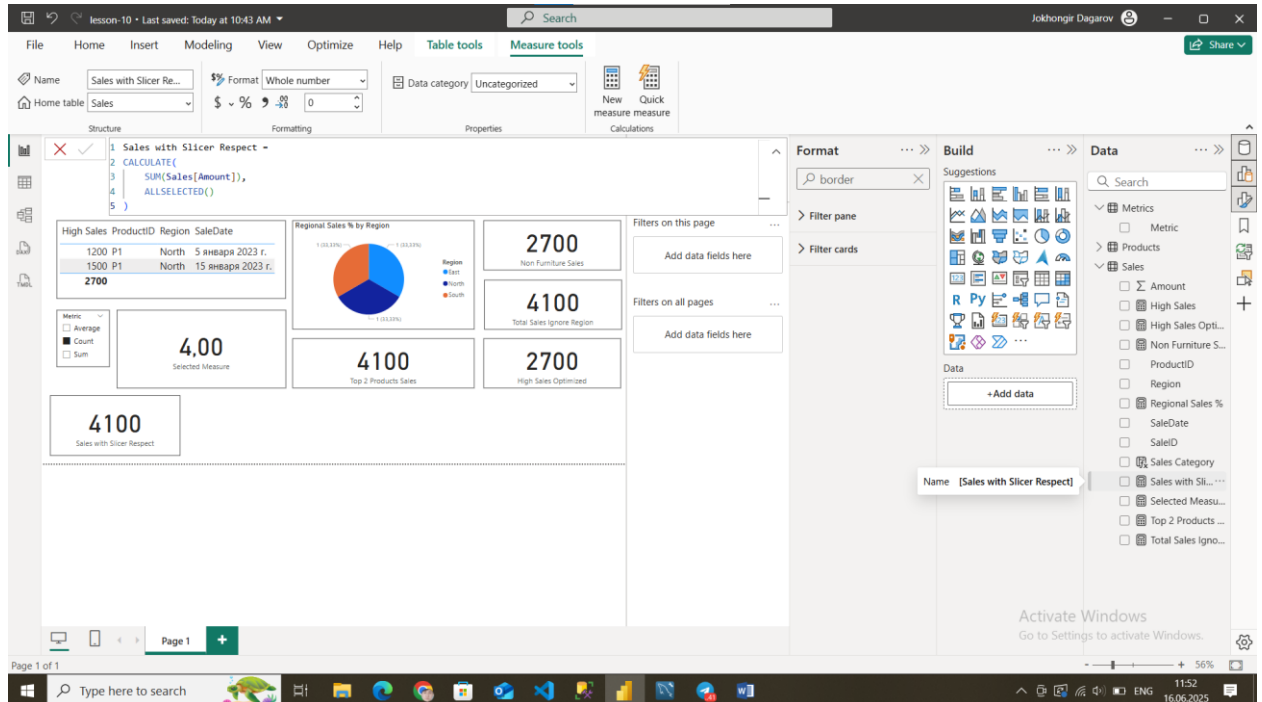
High Sales	ProductID	Region	SaleDate
1200	P1	North	5 января 2023 г.
1500	P1	North	15 января 2023 г.
2700			

4,00
Selected Measure

4100
Total Sales Ignore Region

2700
High Sales Optimized

13. ALLSELECTED with No Parameters



14. Debugging a SWITCH Measure

Issue: If a SWITCH measure uses SELECTEDVALUE or similar logic, it can misbehave if multiple values exist per matrix cell (like when a matrix combines multiple products in one row).

Fix: Ensure proper granularity by adding ProductID/Category columns or adjusting your SELECTEDVALUE fallbacks.

15. Simulate "Reset Filters" Button

