



Filter In DAX & Iterators

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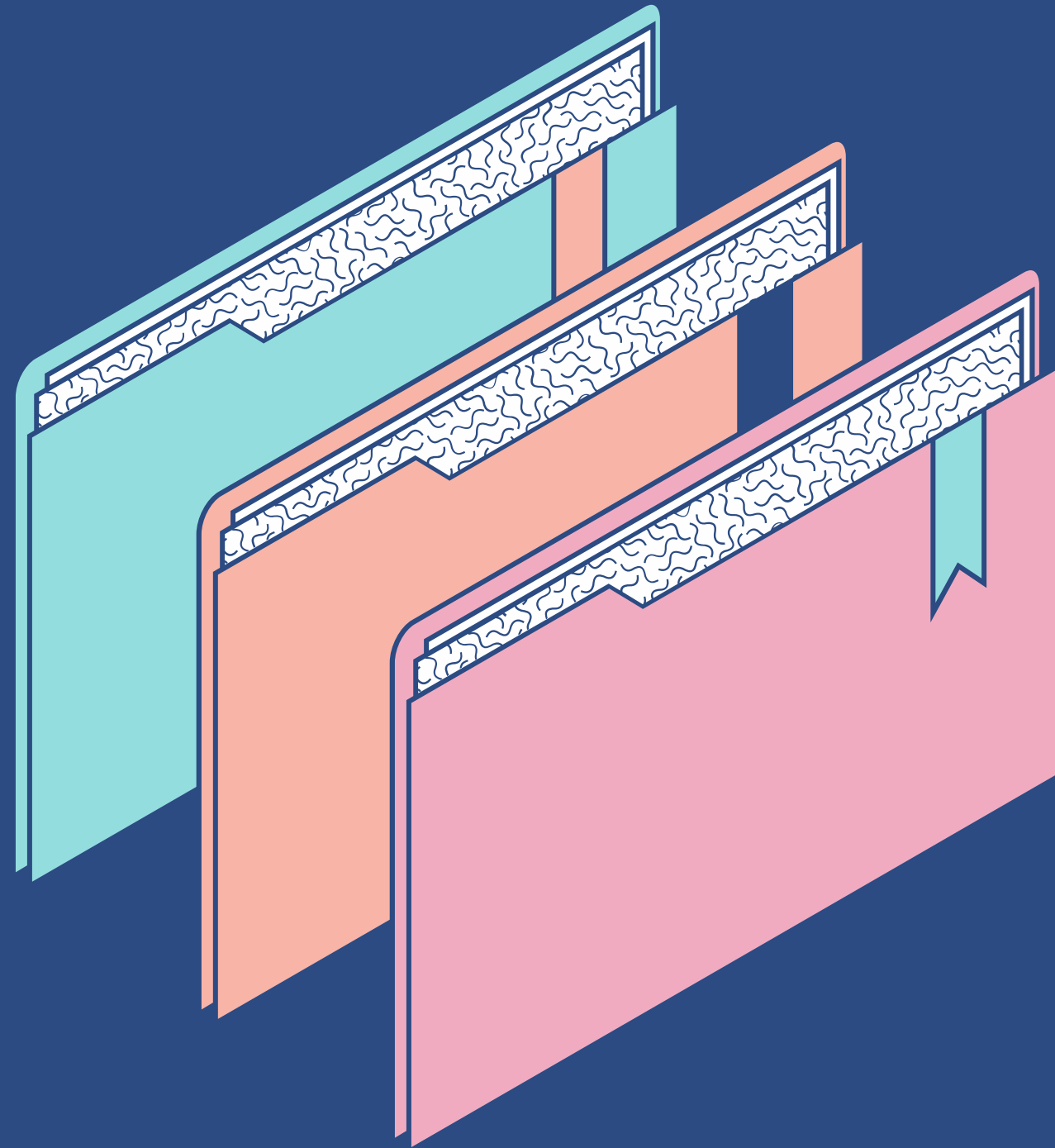
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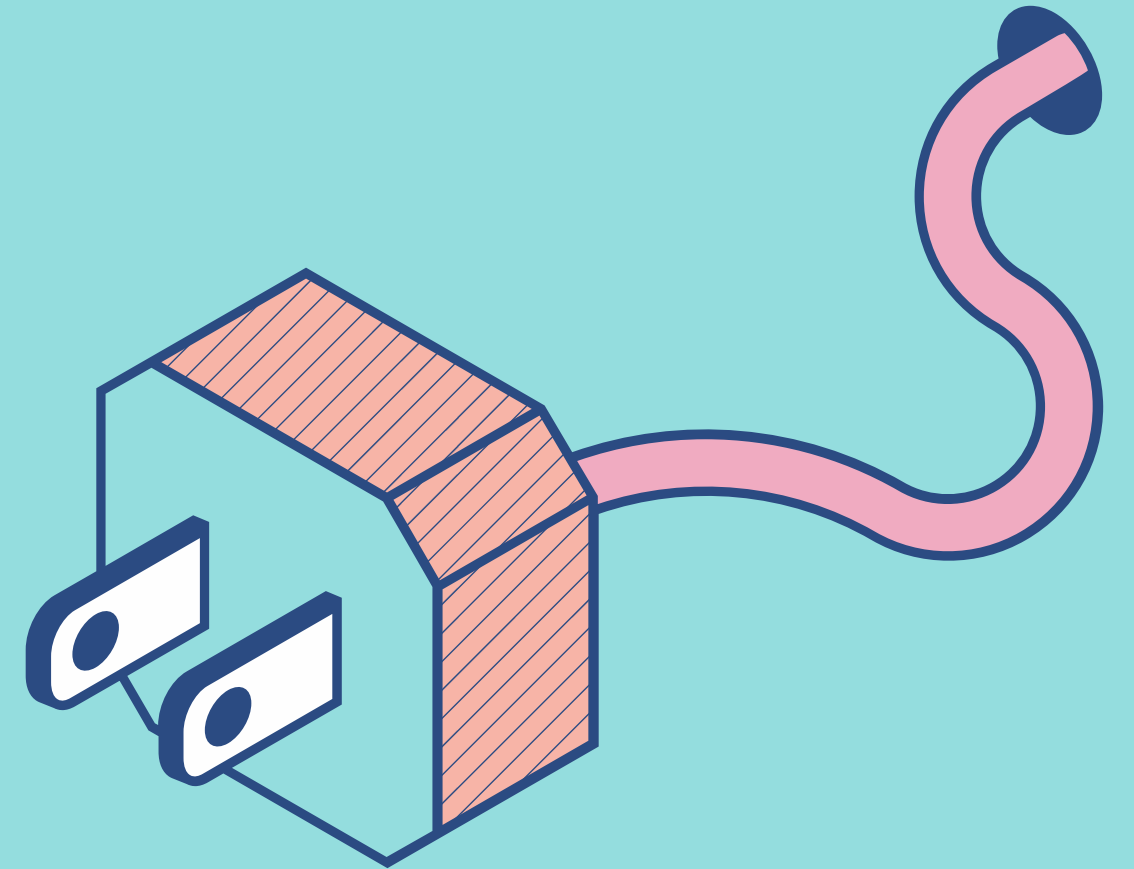
- a. Filter Function
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Filter in Dax

The **FILTER** function and related functions like **ALL** and **ALLEXCEPT** are used to manipulate tables and filter data. Filters can be applied to tables, columns, and rows.



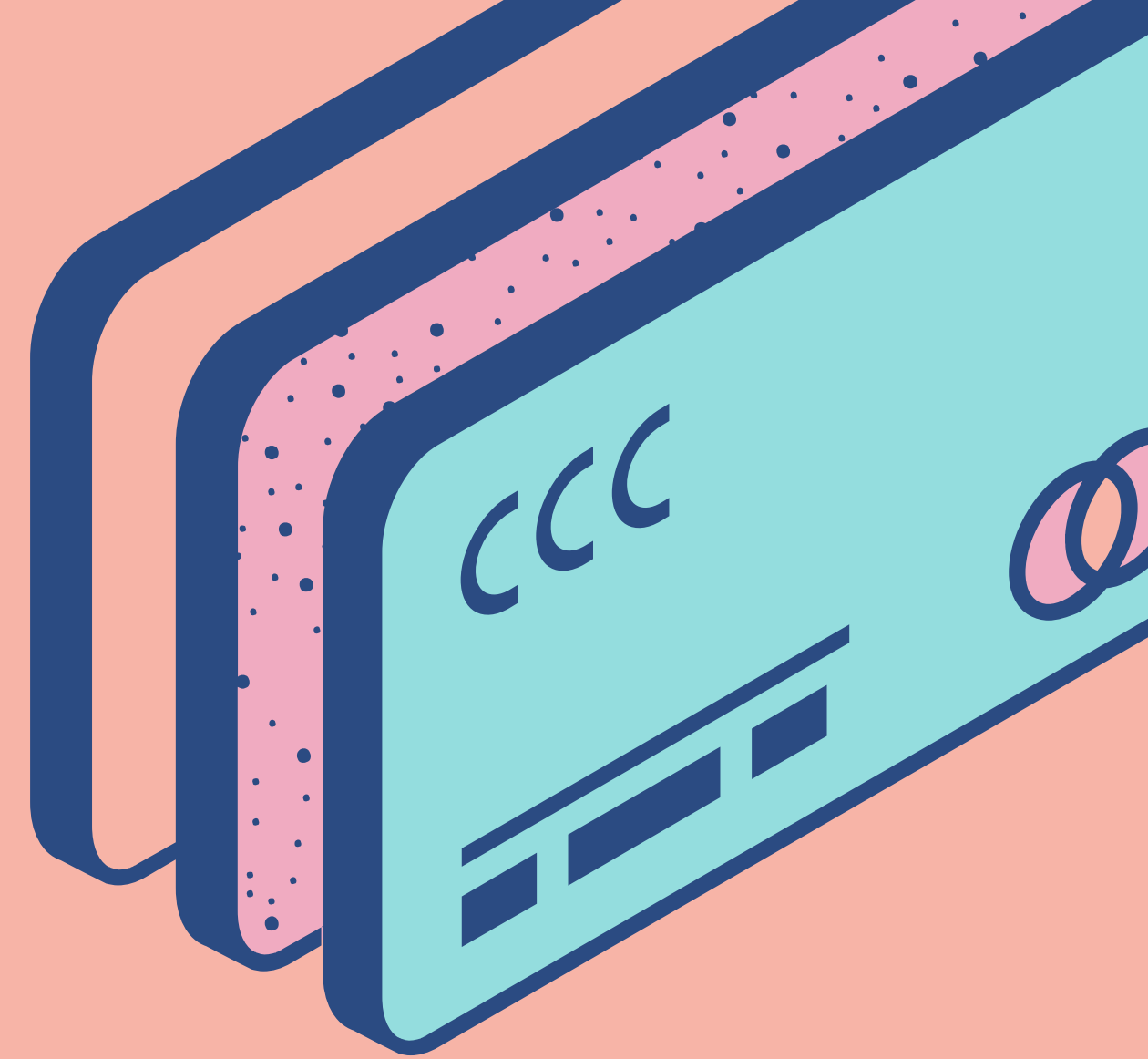
Filter Function

The **FILTER** function is used to filter a table, returning a new table that includes only the rows that meet specific conditions.

Syntax: **FILTER**(Table, Condition)

Example:

```
HighValueCustomers = FILTER(CustomerTable,  
CustomerTable[PurchaseAmount] > 1000)
```



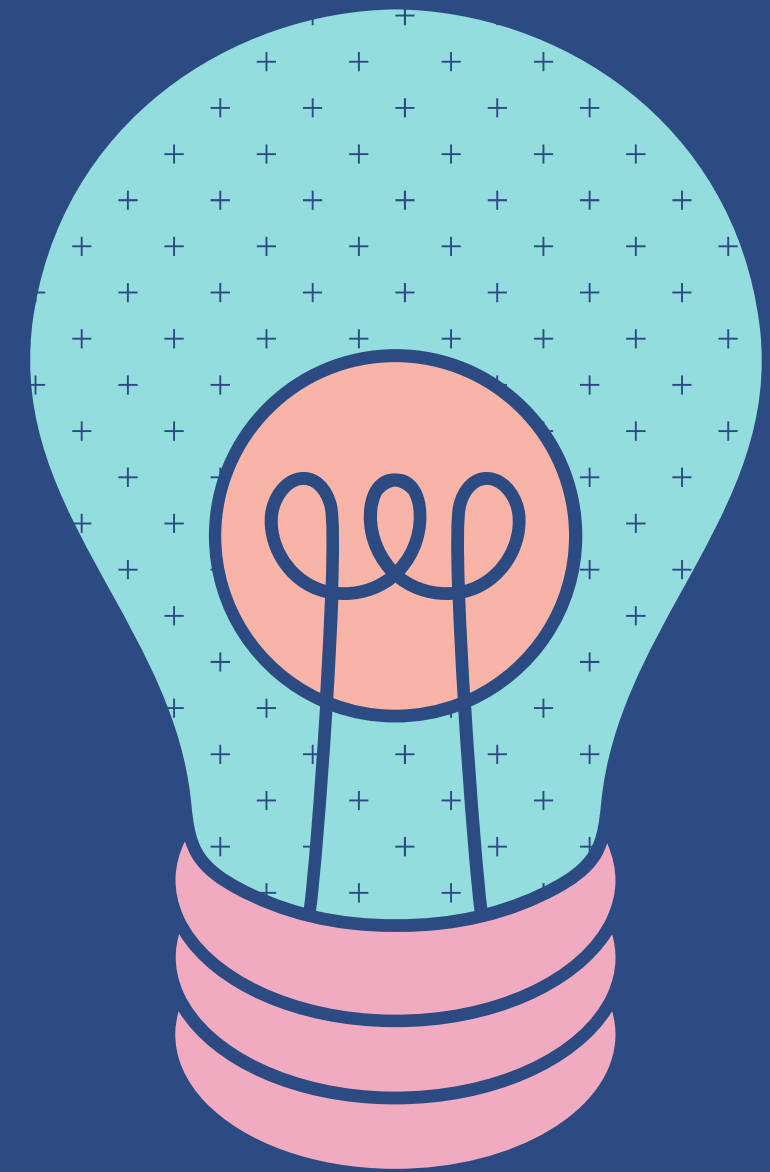
All Function

The ALL function removes or overrides all filters from the specified table or column.

Syntax: ALL(Table)

Example:

```
TotalSales = SUMX(ALL(ProductTable),  
ProductTable[SalesAmount])
```



AllExcept Function

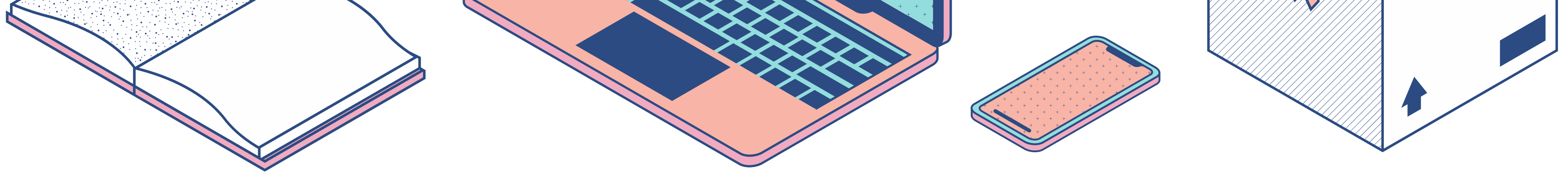
The ALLEXCEPT function is used to remove filters from a table, except for the filters applied to specified columns.

Syntax:

`ALLEXCEPT(Table, Column1, Column2, ...)`

Example:

```
CategoryTotalSales = SUMX(ALLEXCEPT(ProductTable,  
ProductTable[Category]), ProductTable[SalesAmount])
```

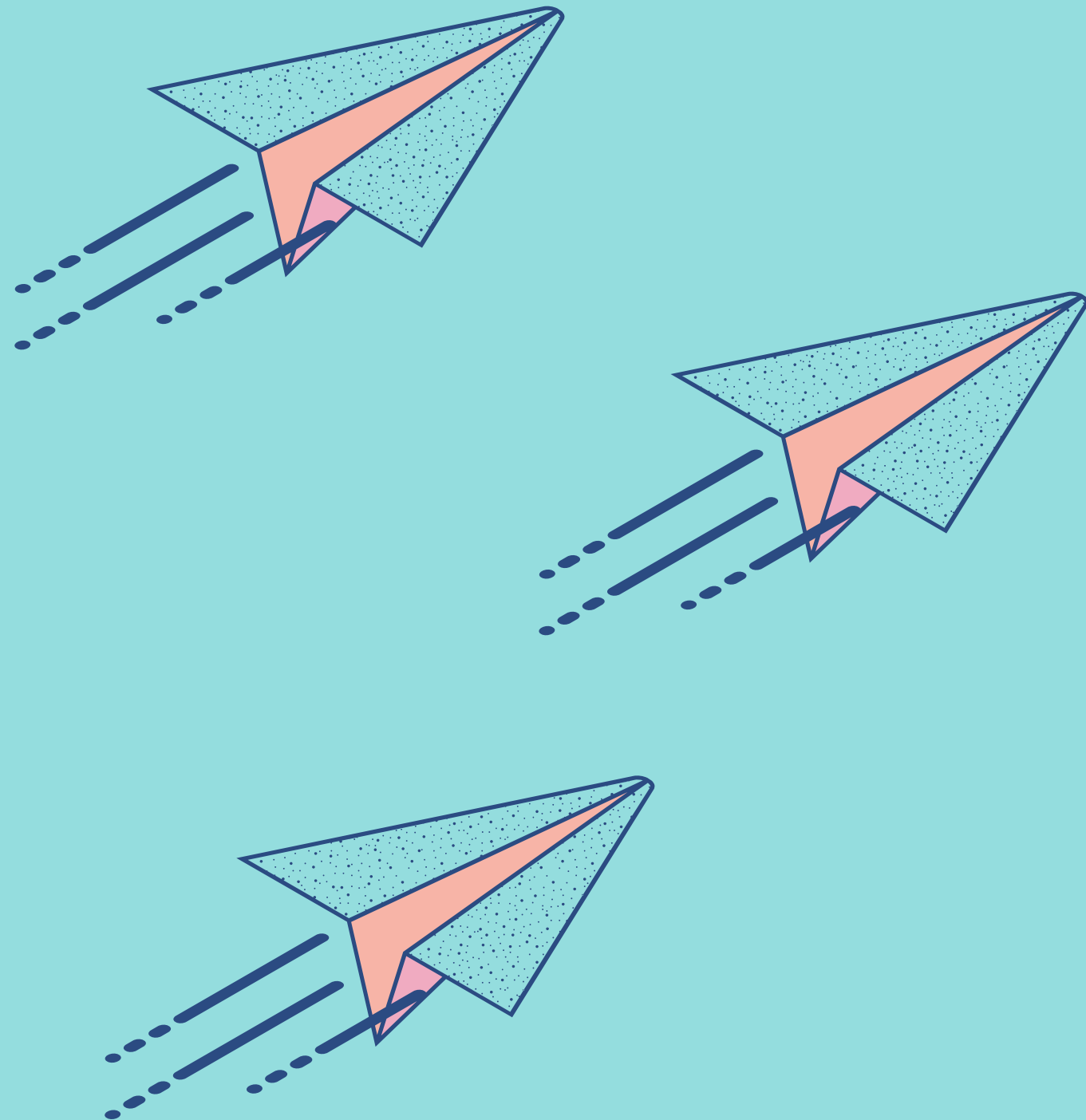
What are iterators in DAX?

- In DAX, iterators are functions used to iterate through rows in a table, performing calculations or transformations on each row. They allow you to work with data at a more granular level.

Why do we use iterators in DAX?

- We use iterators in DAX for various purposes, including filtering data, calculating aggregates, and performing row-level calculations. They provide the flexibility to work with data on a row-by-row basis, enabling complex analyses and custom calculations.

How do iterators work in DAX?



Iterators work by applying a specified expression or calculation to each row of a table. They process the entire table, row by row, and aggregate the results according to the iterator function used.

A black and white photograph of a man with short hair and a beard, wearing a light-colored t-shirt, sitting at a desk and looking at a computer monitor. The monitor displays a web application with various charts and data. The desk also has a mouse and some papers.

How many iterator functions are there in DAX?

DAX provides a range of iterator functions, including but not limited to:

1. `SUMX`: Iterates over a table and sums the results of an expression.
2. `AVERAGEX`: Iterates and calculates the average of an expression.
3. `COUNTAX`: Counts the rows where the expression is true.
4. `FILTER`: Filters a table to return rows meeting specified criteria.
5. `MAXX` and `MINX`: Find the maximum and minimum values, respectively.
6. `ALLSELECTED`: Used to apply filters in a report or visualization.
7. `ROW`: Creates a single-row table.

**Thank You For
Your Attention !!**

