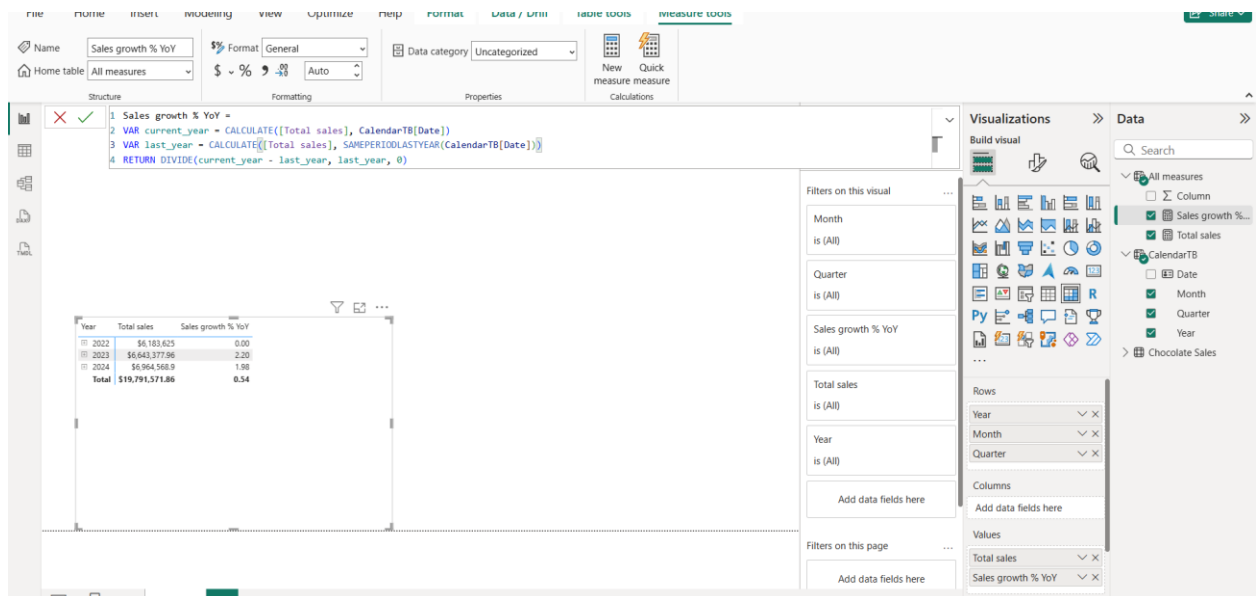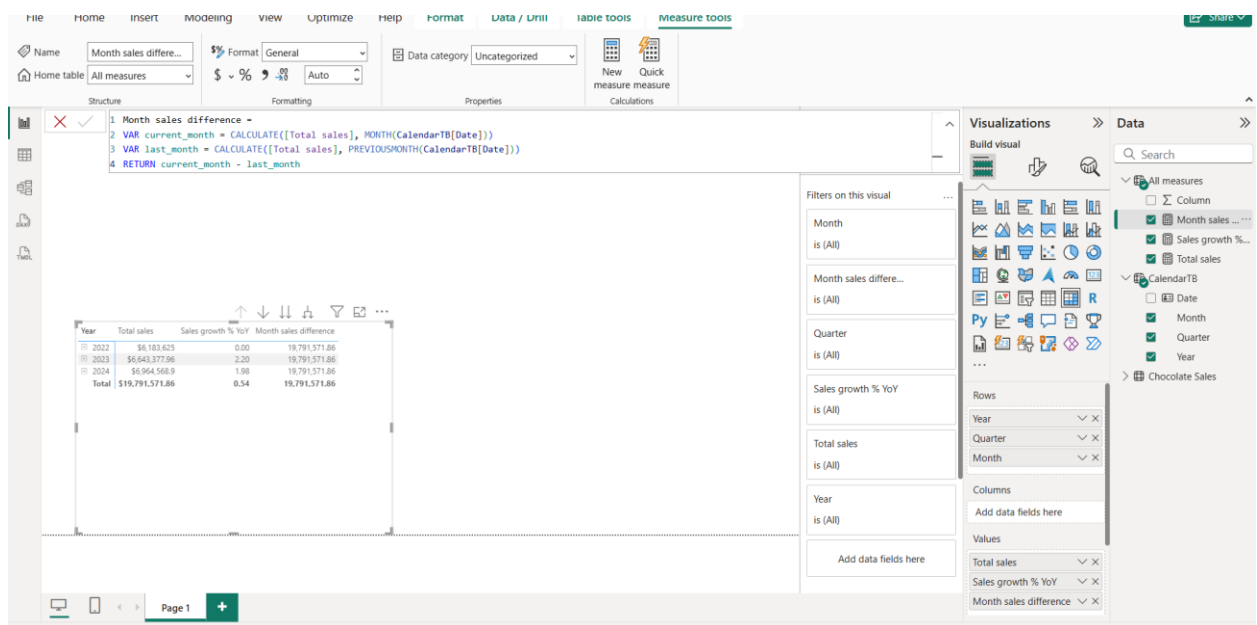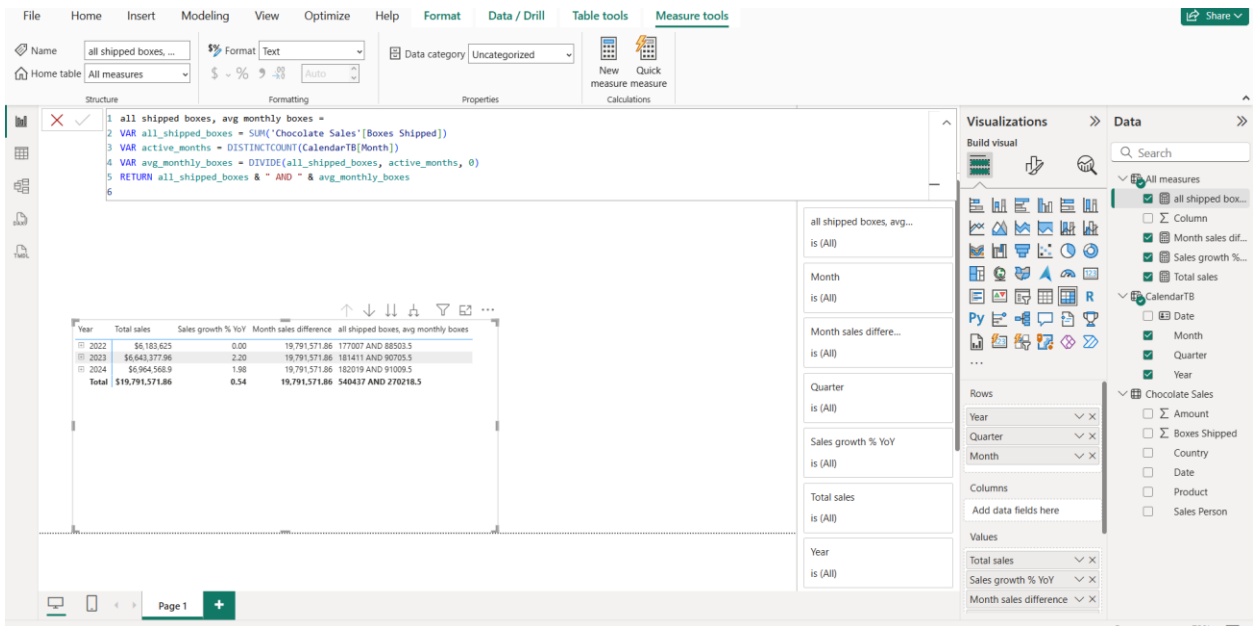- **Use variable to calculate % Growth in Sales Compared to Last Year**
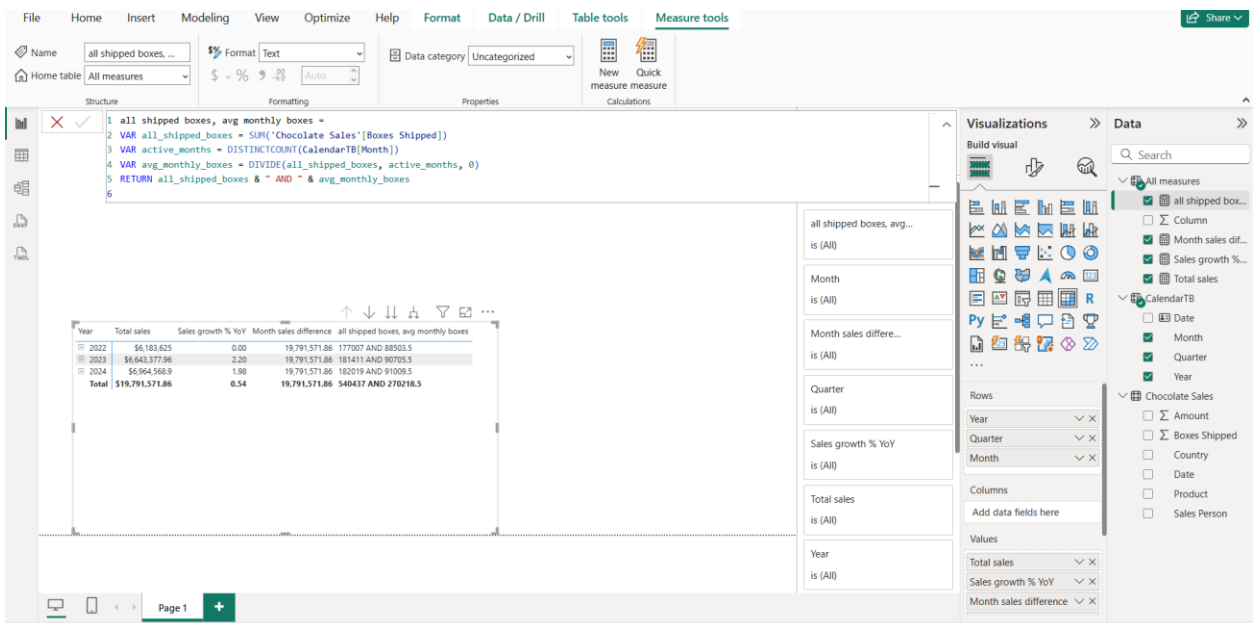

- **Use variable to calculate the difference between Sales Amount of current month and previous month**
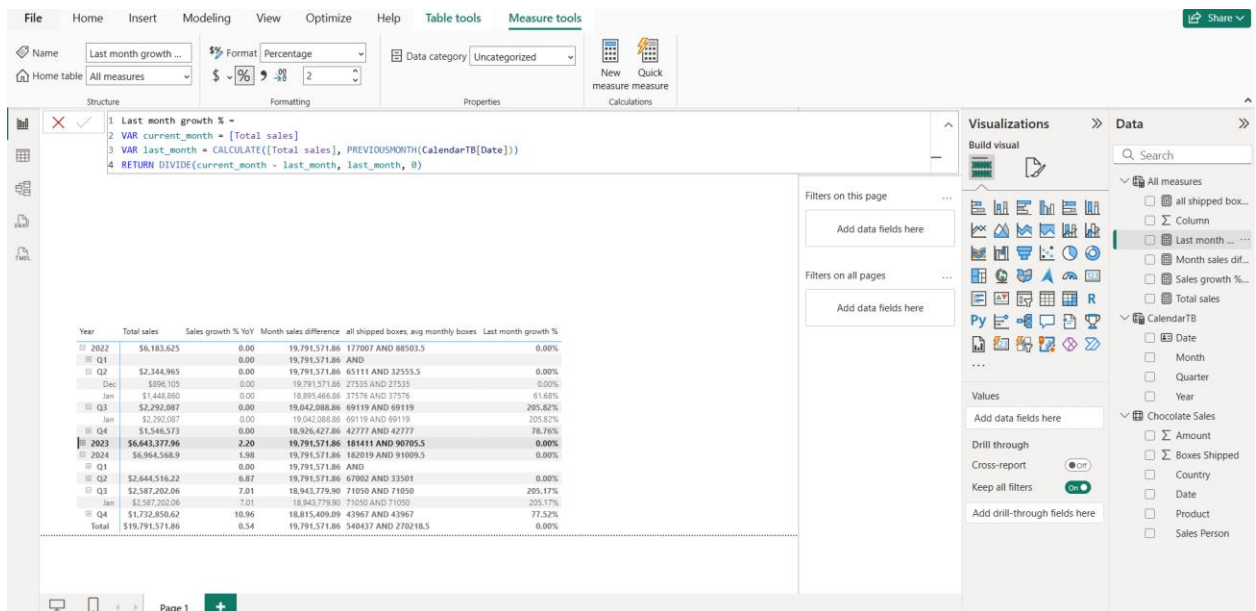

- **Calculate total boxes shipped and average monthly boxes in one measure using VAR**
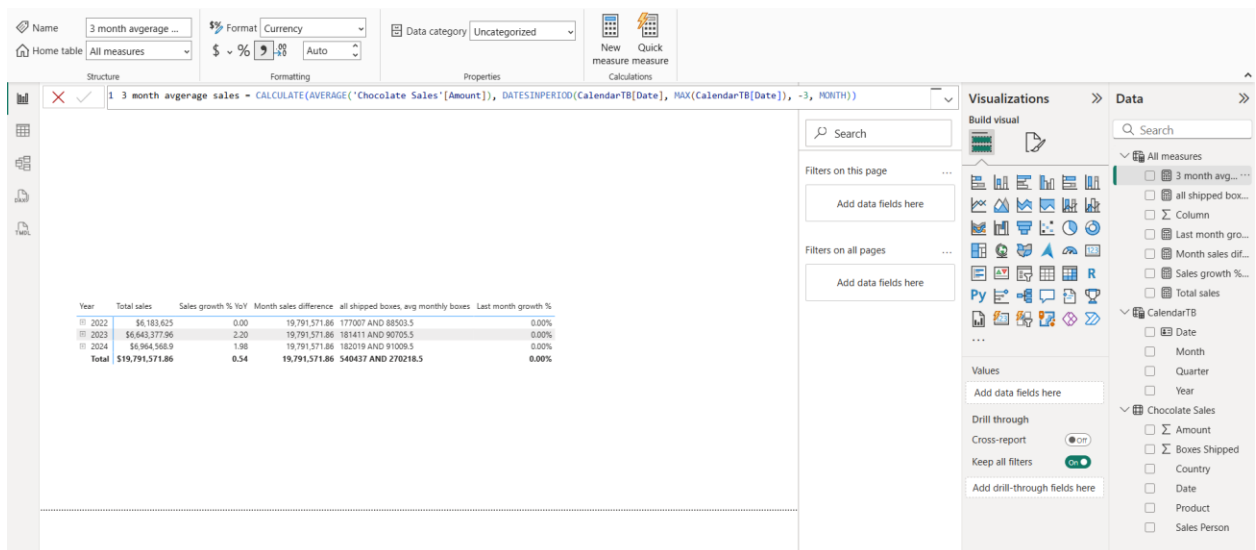
- **Calculate total boxes shipped and average monthly boxes in one measure using VAR and return average monthly boxes.**

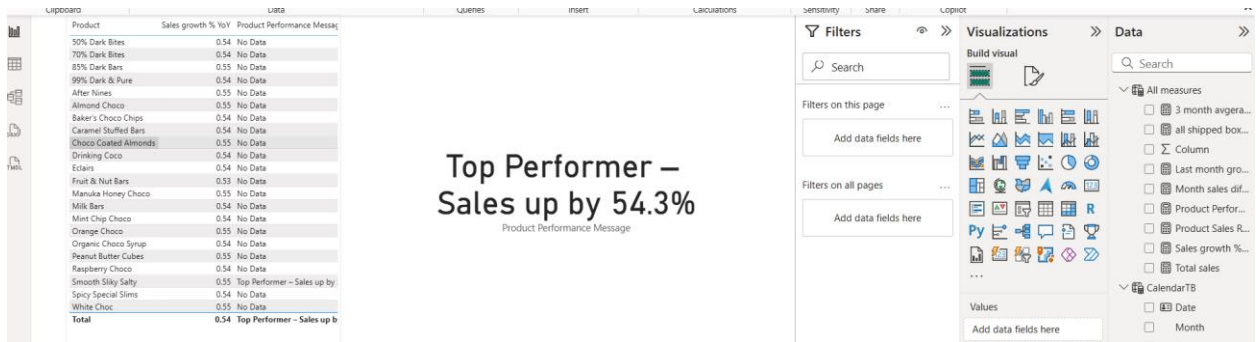- **Calculate growth percentage from last month.**

- **Create a moving average of sales over the last 3 months.**

- **Use Card to show a Dynamic Message Based on Sales Rank and YoY Performance. For each chocolate product show a message like:**
  "Top Performer - Sales up by X%"
  "Consistent Performer"
  "Needs Improvement"
  Ps:(use selectedvalue, rankx, and Time Intelligence functions)

- **List Top 5 tips to optimize DAX query manually and explain why you choose.**

  It is better to use simple aggregate functions – sum, not sumx

  Use Variables (VAR) to Store Repeated Calculations

  Use REMOVEFILTERS over ALL if you're just clearing filters without changing granularity

- **What is the benefit of using DAX optimization tools like DAX Studio, Performance Analyzer,Tabular Editor**

  DAX optimization tools boost report performance.
  DAX Studio analyzes slow queries.
  Performance Analyzer finds slow visuals/measures.
  Tabular Editor helps manage and clean up DAX and the model.
  Together, they help find, understand, and fix performance issues.

- **Create a flag (Yes/No) if a product is in the top 5 by total sales. Use RANKX in a variable; avoid calculating rank more than once.**


```
1  Top 5 Product Flag =
2  VAR productRank =
3      RANKX(
4          ALL('Chocolate Sales'[Product]),
5          [Total sales],
6          ,
7          DESC
8      )
9  RETURN IF(productRank <= 5, "Yes", "No")
10
```