- 1. List Top 5 tips to optimize DAX query manually and explain why you choose.
 - 1. Reduce Filter Context Early with REMOVEFILTERS, KEEPFILTERS, or SELECTEDVALUE

Why: Too many filters slow down evaluation, especially when unnecessary filters propagate through relationships.

2. Avoid Row Context Iterators (e.g., SUMX, FILTER, ADDCOLUMNS) When Possible

Why: Iterators are powerful but expensive. Using them unnecessarily slows down DAX.

3. Use VAR to Store Repeating Expressions

Why: DAX recomputes expressions unless you store them in a variable. This also improves readability.

4. Filter Tables Efficiently with FILTER + ALL Instead of CALCULATE with Row Logic

Why: Using row-level logic inside CALCULATE (e.g., Amount > 1000) creates a poor query plan.

5. Pre-Aggregate in Power Query or Data Model Where Possible

Why: DAX is not designed to be a full ETL tool. Repeatedly calculating derived metrics (like totals per region or year) in DAX is inefficient.

- What is the benefit of using DAX optimization tools like DAX Studio, Performance Analyzer, Tabular Editor
 - **DAX Studio** helps identify slow queries and bottlenecks, **Performance Analyzer** shows which visuals and DAX are slow in your report, and **Tabular Editor** streamlines model editing, refactoring, and applying best practices for efficient DAX and model management.