***ALL SQL QUERIES IN SQL FILES***

Step 1: Ensure Staging Tables Are in Place

Since the task involves creating a data mart with fact and dimension tables around suppliers, let’s first ensure we have the necessary staging tables.

In this case, we’ll need a staging table for suppliers that can later be transformed into the necessary fact and dimension tables. The staging tables should capture raw supplier data before it’s transformed for analysis.

Supplier Staging Table

If there isn't already a staging table for supplier data, we’ll create one. Here’s a sample structure for a supplier staging table based on the supplier table in the northwind schema:

This staging\_suppliers table would temporarily hold the supplier data as we prepare to move it into a structured data mart.

Check if staging\_suppliers exists and has data.

Populate it if empty, using the data from the original suppliers table:

Step 1.1: Creating Staging Tables

We need to create staging tables if they don’t already exist. Here’s the setup for the staging tables required:

staging\_products

This table stores raw product data before transforming it for analysis.

staging\_suppliers staging\_order\_details

Step 1.2: Creating the Dimension Table DimSupplier

This dimension table will store unique supplier information to support analytical needs.

DimSupplier

Step 1.3: Creating the Fact Table FactSupplierPurchases

This fact table aggregates purchase data by supplier, using staging\_order\_details for detailed order data and linking it to staging\_products and DimSupplier for supplier information

Step 1.4: Populating the Fact Table FactSupplierPurchases

This step aggregates data from staging\_order\_details and staging\_products to populate the fact table with aggregated purchase amounts and product counts per supplier.

Step 1.5: Querying the Data Mart

Here are some queries for typical business reports:

Supplier Performance Report

Supplier Spending Analysis

Product Cost Breakdown by Supplier

Supplier Reliability Evaluation Report

Top Five Products by Total Purchases per Supplier