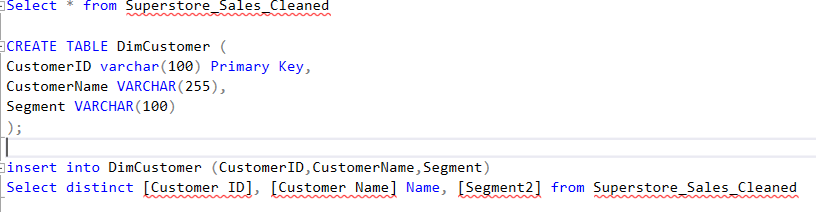
**Data Modeling and Data Analysis Using Microsoft SQL**

**A screenshot of a computer

AI-generated content may be incorrect.**

* **Explanation**
* a star schema data model used in a data warehouse or business intelligence system. It consists of one Fact table (FactSales) and several Dimension tables (DimCustomer, DimProduct, DimDate, DimRegion).



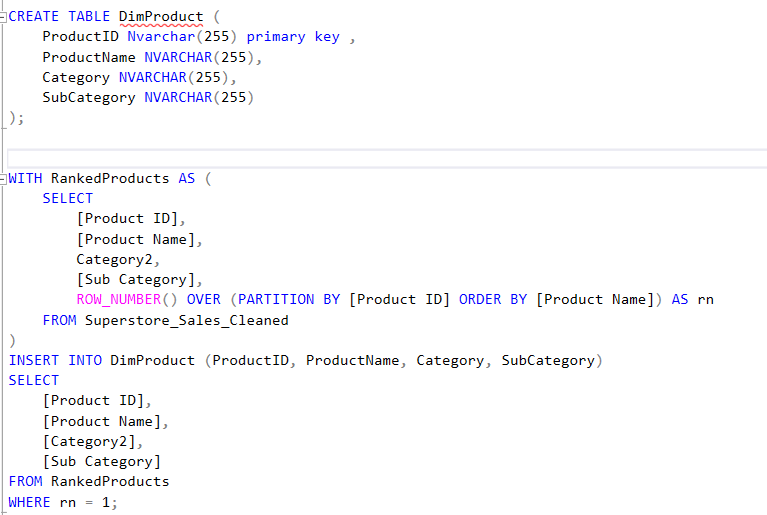
* **Purpose**
* To create a clean **customer dimension table (DimCustomer)** by extracting unique customer records from the main sales fact table (Superstore\_Sales\_Cleaned). This is useful for building dashboards or star schema models in data analysis and business intelligence.

A screenshot of a computer program

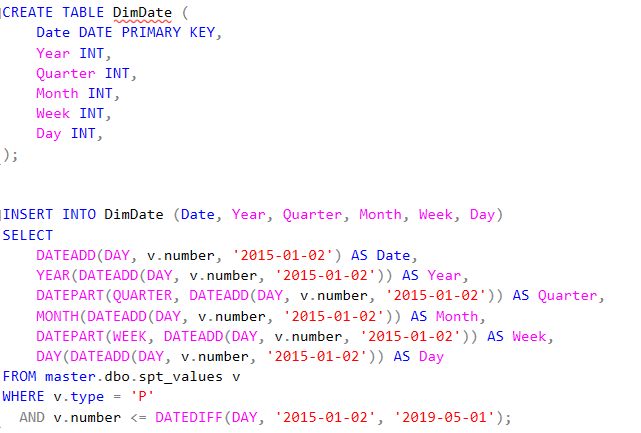
AI-generated content may be incorrect.

* **Purpose**

The purpose is to create a **DimRegion** table with unique regional data by using ROW\_NUMBER to remove duplicates.



* **Purpose**
* code creates a DimProduct table with ProductID (primary key), ProductName, Category, and SubCategory. It ranks products from Superstore\_Sales\_Cleaned using ROW\_NUMBER() and inserts the top-ranked row into DimProduct for data warehousing.

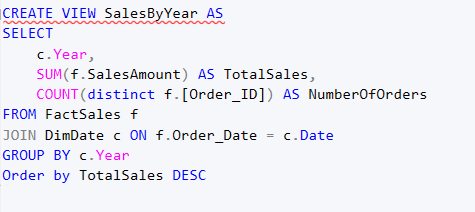


* **Purpose**
* To generate a date dimension table (DimDate) that contains detailed breakdowns of each date between January 2, 2015 and May 1, 2019.

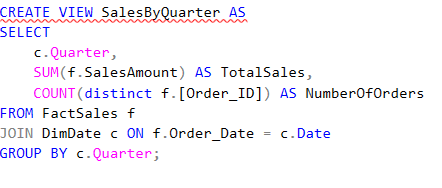
A computer screen shot of a computer code

AI-generated content may be incorrect.

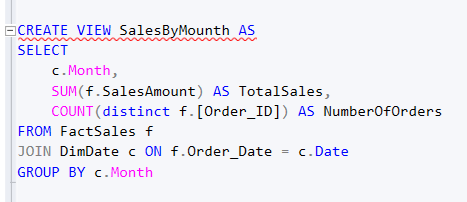
* **Purpose**
* Sets up a fact table for sales transactions with referential integrity to dimension tables, likely for a data warehouse.



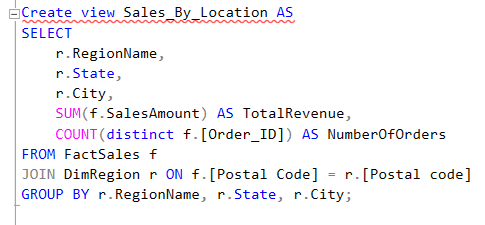
* **Purpose**
* Creates a view named SalesByYear to summarize sales data by year.



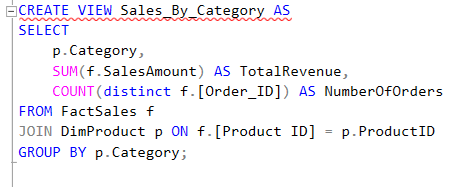
* **Purpose**
* Creates a view named SalesByQuarter to summarize sales data by quarter. Its purpose:

****

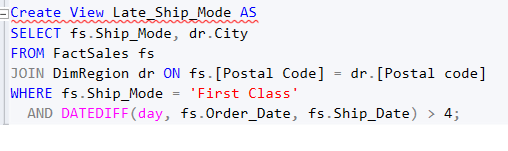
* **Purpose**
* creates a view named SalesByMonth to summarize sales data by month

****

* **Purpose**
* creates a view named Sales\_By\_Location to summarize sales data by location.

****

* **Purpose**
* creates a view named Sales\_By\_Category to summarize sales data by product category.



* **Purpose**
* creates a view named Late\_Ship\_Mode to identify late shipments.