SQL Project Summary: Adventure Works Sales Analysis

**🔷 1. Format & Tool Used**

* **Tool:** MySQL Workbench 8.0 CE
* **Data Format:** All 8 Adventure Works tables were imported as .csv files using **Table Data Import Wizard** in MySQL Workbench.
* **Schema Name:** sqltableauadventureworkproject

**🔷 2. Tables Used**

You worked with 8 tables:

* **Fact Tables (2):** FactInternetSales, Fact\_Internet\_Sales\_New
* **Dimension Tables (6):** DimCustomer, DimDate, DimProduct, DimProductCategory, DimProductSubCategory, DimSalesTerritory

**🔷 3. SQL Steps Performed**

**✅ Step 1: Append Fact Tables**

* You combined two fact tables (FactInternetSales + Fact\_Internet\_Sales\_New) into a single table:

sql

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CREATE TABLE Sales AS

SELECT \* FROM FactInternetSales

UNION ALL

SELECT \* FROM Fact\_Internet\_Sales\_New;

📌 *Why?* To have one clean Sales fact table for analysis.

**✅ Step 2: Create Product Master View**

* Merged DimProduct, DimProductSubCategory, DimProductCategory:

sql

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CREATE OR REPLACE VIEW ProductMaster AS

SELECT

p.ProductKey, p.EnglishProductName, p.StandardCost, ...

sub.EnglishProductSubcategoryName,

cat.EnglishProductCategoryName

FROM DimProduct p

LEFT JOIN DimProductSubCategory sub ON p.ProductSubcategoryKey = sub.ProductSubcategoryKey

LEFT JOIN DimProductCategory cat ON sub.ProductCategoryKey = cat.ProductCategoryKey;

📌 *Why?* To enrich product details for each sale.

**✅ Step 3: Add Product & Customer Info to Sales**

* Used joins to add CustomerFullName and EnglishProductName to Sales:

sql

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CREATE OR REPLACE VIEW Sales\_With\_CustomerProductDetails AS

SELECT

s.\*,

CONCAT(c.FirstName, ' ', c.LastName) AS CustomerFullName,

p.EnglishProductName, p.StandardCost

FROM Sales s

LEFT JOIN DimCustomer c ON s.CustomerKey = c.CustomerKey

LEFT JOIN ProductMaster p ON s.ProductKey = p.ProductKey;

**✅ Step 4: Add Date Info to Sales**

* Created date-based fields from DimDate:

sql

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CREATE OR REPLACE VIEW Sales\_With\_DateDetails AS

SELECT

s.\*,

d.FullDateAlternateKey AS OrderDate,

d.CalendarYear AS Year,

d.EnglishMonthName AS MonthFullName,

d.CalendarQuarter AS Quarter,

...

CASE

WHEN d.MonthNumberOfYear >= 4 THEN d.MonthNumberOfYear - 3

ELSE d.MonthNumberOfYear + 9

END AS FinancialMonth,

...

FROM Sales\_With\_CustomerProductDetails s

LEFT JOIN DimDate d ON s.OrderDateKey = d.DateKey;

📌 *Why?* For Monthly, Yearly, Quarter-wise and Financial Year analysis.

**🔷 4. Final Table Used in Tableau**

* **View Name:** Sales\_With\_DateDetails

This view contains all cleaned, enriched, and joined data.

**🔷 5. Connect to Tableau**

**➤ Steps to Connect:**

1. Open **Tableau Desktop** → Choose **MySQL** as connector.
2. Enter:
   * **Server:** localhost
   * **Port:** 3306 (default)
   * **Database Name:** sqltableauadventureworkproject
   * Username & Password (same as MySQL Workbench)
3. Click **Sign In**.
4. Drag your final view: Sales\_With\_DateDetails into canvas.
5. Create **relationships** or directly start building dashboards.