Microsoft Fabric in a Day Lab Manual – Lab 5

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# Data Warehousing – Designing Your Data Warehouse Strategy in Fabric

## Introduction:

## In this lab, we will be creating a new **Fabric Warehouse** to serve as the **Gold** layer in our medallion pattern. We will explore several techniques for loading data into the warehouse, including views, cross-database joins, and **CTAS** (Create Table As Select) statements.

## Part 1: Creating the Warehouse

**Creating the Warehouse:** To begin, navigate to the **Warehouse** experience within your workspace. Click on **Warehouse** from the tiles across the top. Name your new warehouse **gold\_warehouse\_{your\_initials}** and click **Create**.

You now have an empty **Fabric Warehouse** and have successfully completed **Part 1** of this lab.

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## Part 2: Creating and Loading a Table Using TSQL

**Creating and Loading a Table Using TSQL:** In this exercise, you’ll use **TSQL** to create a table in the **Warehouse** and then load data into it.

To begin, navigate to the **Fabric Warehouse** from the workspace landing page. Click **New SQL Query** from the action ribbon at the top. Write the **CREATE TABLE** statement shown in the image below, then click **Run**. You can also refer to the lab file **Create and Load Customer Dimension** for reference.

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Once the query is executed, the schema of the warehouse will update to reflect the newly created empty table.

Next, click **New SQL Query** again from the top ribbon to open a blank query. Click the **+ Warehouses** button in the **Explorer**, check the box for the **Lab 1 Lakehouse**, and click **Connect**.

In the query window, write a **SELECT** statement and use the **click+drag** functionality to populate the three-part table identifier from the previous lab. Once the query is complete, click **Run**.

Finally, click on the **dim\_customer** table in the **Fabric Warehouse Explorer** to preview the newly loaded data.

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You have now successfully completed **Part 2** of this lab.

## Part 3: Creating and Loading a Table Using CTAS (CREATE TABLE AS SELECT)

**Combining Create and Load with CTAS:** In your **Fabric Warehouse**, you can combine the table creation and data loading process using the **CREATE TABLE AS SELECT** (CTAS) functionality. If needed, refer to the supporting **Create and Load Stock Items Dimension** file from the lab coursework.

To start, navigate to the **Fabric Warehouse** from the workspace landing page. Click **New SQL Query** from the action ribbon at the top.

In the query window, write the following **SQL** statement. Use the **click+drag** functionality to populate the three-part table identifier from the previous lab, then click **Run**.

Once executed, the **dim\_stock\_items** table will be added to the schema of your **Fabric Warehouse** and will be available for previewing.

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**Using CREATE and COPY INTO:** Access the **Create and Load Delivery Method Dimension** file from the coursework. The COPY INTO structure allows you to **COPY INTO FROM** supported data formats from an external location such as a blob storage.

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## Part 4: Creating Remaining Objects

**Completing the Lab with Provided CTAS Code:** For the final part of this lab, we’ve provided the code to create the remaining tables using the **CREATE TABLE AS SELECT (CTAS)** method. You will need to use the supporting file to copy and paste the SQL statements into your **Fabric Warehouse** query editor.

To start, copy the SQL queries from the **Fabric Warehouse CTAS Statements** document and paste them into a new query in the **Fabric Warehouse** query editor. Replace the Lakehouse names with the correct name of your **Silver Lakehouse** artifacts, then click **Run**.

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Once the queries have executed, you should have a total of 6 tables in your model.

You have now successfully completed **Lab 6**.

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