

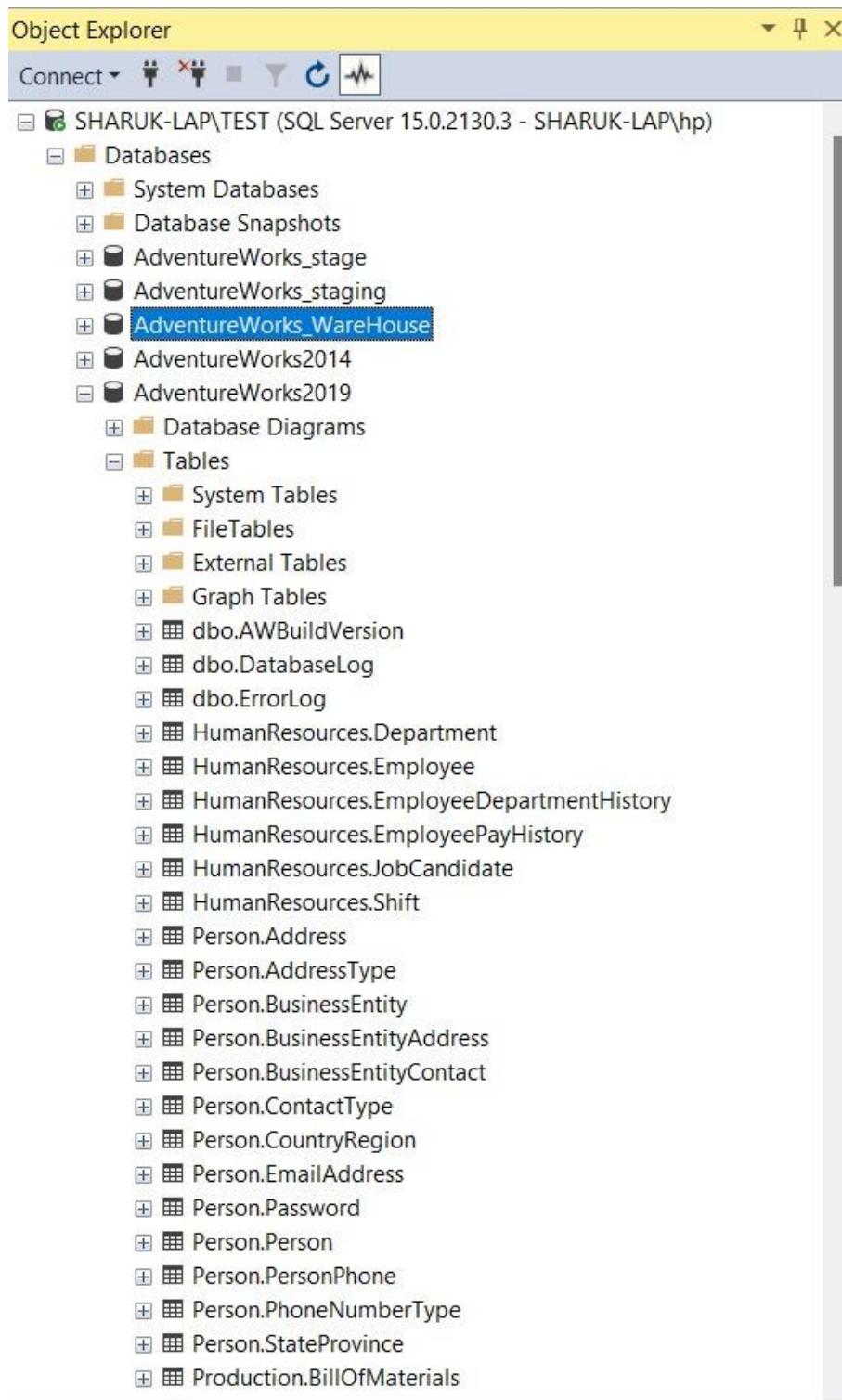
Implementation of an On-Premises Data Warehouse Using SQL Server

I began by downloading the AdventureWorks2019 dataset and restoring it in SQL Server. Upon reviewing the data, I identified that the dataset contained 71 tables. Based on the assignment requirements, I selected the necessary data and proceeded with the ETL (Extract, Transform, Load) process.

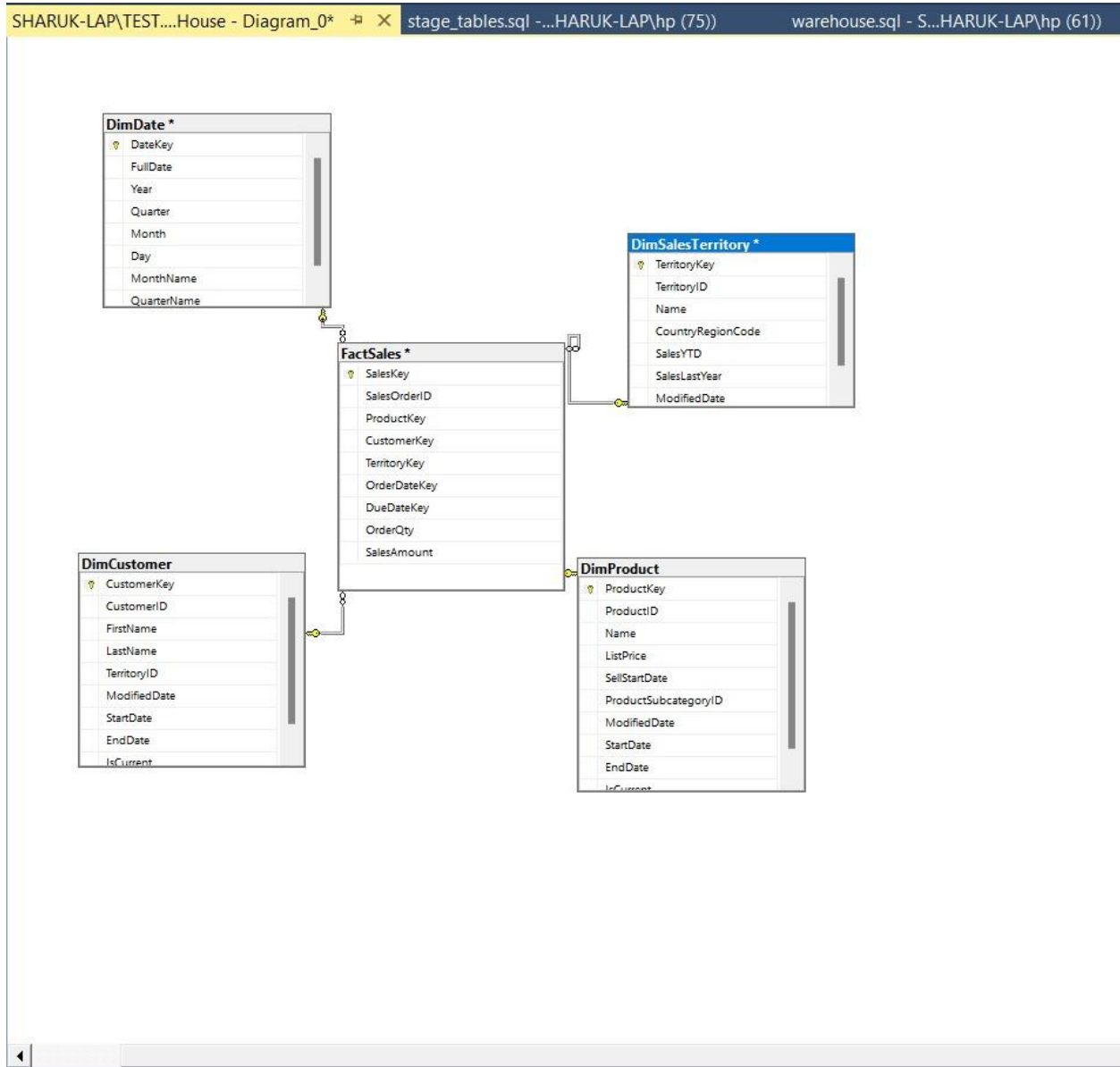
Using SQL Server Integration Services (SSIS), I extracted the required tables and selected the relevant columns to stage the data. After performing the necessary transformations, I utilized SSIS again to create a data warehouse and merged the required tables.

Subsequently, I employed SQL Server Analysis Services (SSAS) to analyze the final dataset. Finally, I used Power BI to present the data through visual reports and dashboards, ensuring clear insights and effective data representation.

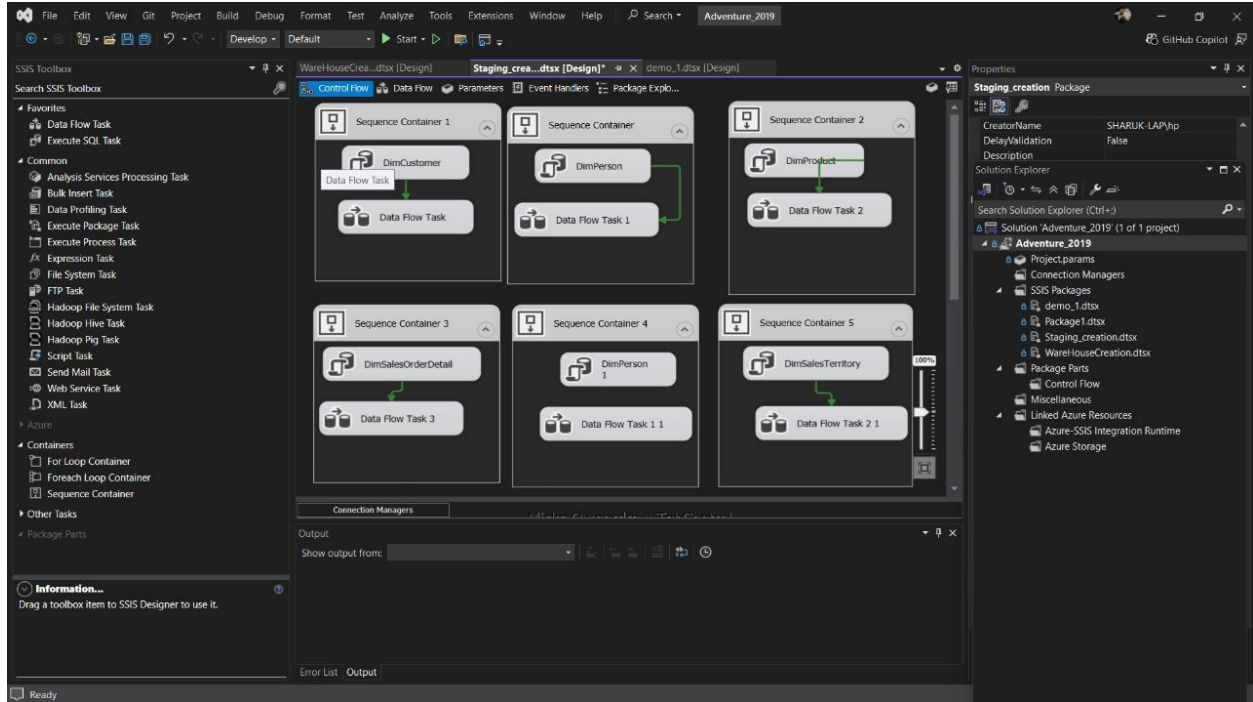
Table Overview



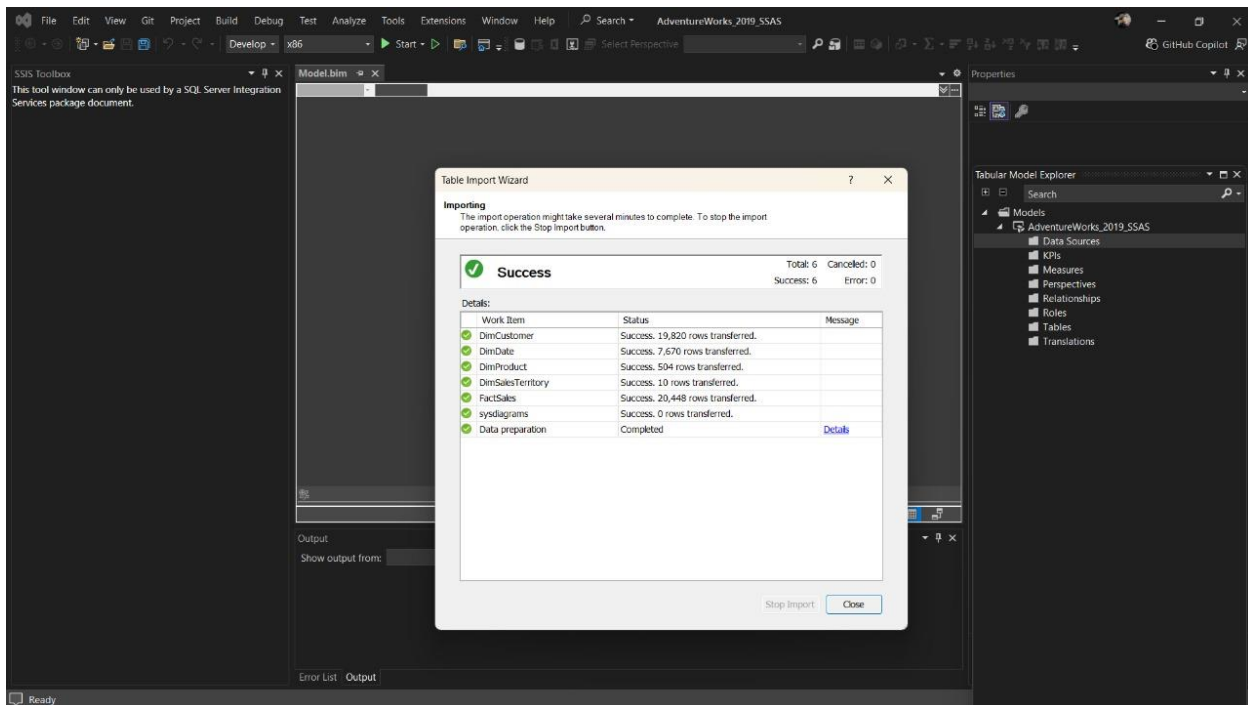
The following provides an overview of the scheme



SSIS Overview



Imported into SSAS



Identified the measures using SSAS, and the deployment was successful.

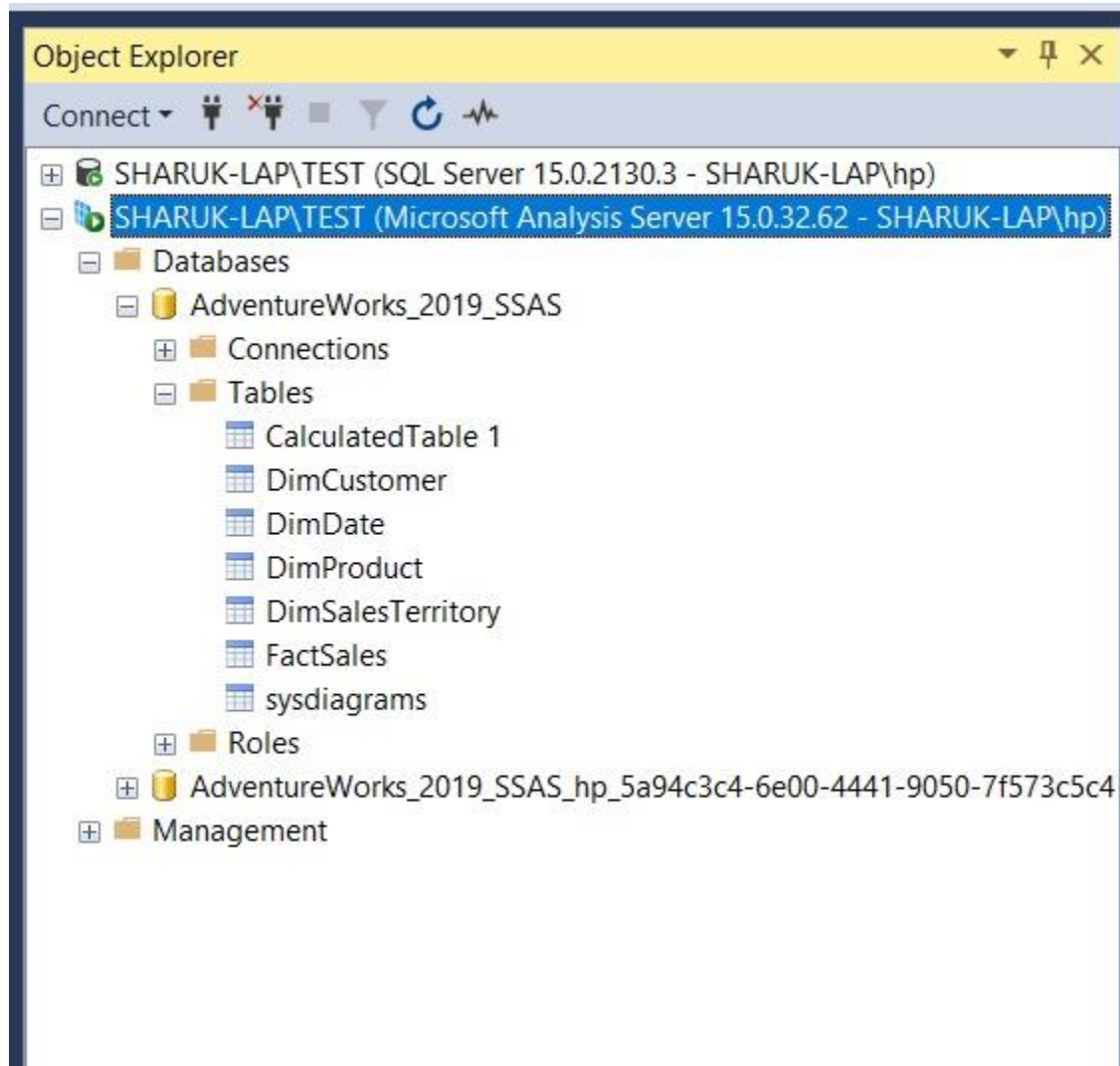
The screenshot shows the SQL Server Data Tools (SSDT) interface. The main window displays a table with columns: CustomerID, FirstName, LastName, TerritoryID, ModifiedDate, and a calculated measure 'Total Sales: SUM(FactSales[SalesAmount])'. The table contains 20 rows of data. Below the table, there are summary statistics: Total Sales: 36645334.1615, Total Orders: 4334, Sales YTD: 36645334.161, Sales MTD: 36645334.161, Number of Items Ordered: 59763, and Sales by Item Ordered: 36645334.1615.

A 'Deploy' dialog box is open, showing a 'Success' status. The dialog box contains a table with the following data:

Work Item	Status	Message
Deploy metadata	Success	Metadata deployed.
DimCustomer	Success	19,820 rows transferred.
DimDate	Success	7,670 rows transferred.
DimProduct	Success	504 rows transferred.
DimSalesTerritory	Success	10 rows transferred.
FactSales	Success	20,448 rows transferred.
sysdiagrams	Success	0 rows transferred.
CalculatedTable 1	Success	

The dialog box also shows a summary of the deployment: 8 Total, 0 Cancelled, 8 Success, 0 Error. At the bottom, there are buttons for 'Stop Deployment' and 'Close'.

Identified the measures using SSAS, and the deployment was successful.



Power BI Visualization

