Okay, let's break down this Qlik Sense script.

Section Title: Customer Load

- What it does: Loads customer data from a CSV file.
- Data Source: Customers.csv located in a library named Data.
- Fields: CustomerID, FirstName, LastName, Country, JoinDate (derived from DateJoined).
- **©** Filters or Conditions: None.
- So Joins or Relationships: None in this section.
- **Variables Used**: None.
- **A** Warnings or Red Flags: None.
- Suggestions for Improvement: Consider adding a Keep statement to filter unnecessary columns if this table is only used for a specific purpose (e.g., only displaying CustomerId and Name in a UI table).

Section Title: Product Load

- What it does: Loads product data from a CSV file.
- Data Source: Products.csv located in the Data library.
- **Fields**: ProductID, ProductName, Category, Price.
- **©** Filters or Conditions: None.
- Doins or Relationships: None in this section.
- **Variables Used**: None.
- <u>A</u> Warnings or Red Flags: None.
- **Suggestions for Improvement**: None.

Section Title: Orders Raw Load

- What it does: Loads raw order data from a CSV file.
- Data Source: Orders.csv located in the Data library.
- **Fields**: OrderID, CustomerID, ProductID, OrderDate (derived from OrderDate), Quantity.
- **©** Filters or Conditions: None.
- **Solution** Joins or Relationships: None in this section.
- **Variables Used**: None.
- **A** Warnings or Red Flags: None.
- **Suggestions for Improvement**: None.

Section Title: Orders Enrichment

- What it does: Calculates the total amount for each order and joins product prices to calculate the order totals.
- **Data Source**: OrdersRaw (RESIDENT) and Products (RESIDENT).
- Fields: All fields from OrdersRaw, plus TotalAmount (calculated as Quantity * Price).
- **©** Filters or Conditions: None.
- Solution Joins or Relationships: Orders table is built using a LEFT JOIN with the Products table on ProductID.
- **Variables Used:** None.

- <u>A Warnings or Red Flags</u>: The code loads Price from Products which is inefficient. Consider performing a join with the Products table earlier to avoid having to load the same data multiple times.
- Suggestions for Improvement: Change the Orders load to join all necessary fields from Products in the first load.

Section Title: Drop OrdersRaw

- What it does: Drops the Orders Raw table from the data model.
- Data Source: Orders Raw (Table within the Qlik Model)
- **B** Fields: N/A
- **6** Filters or Conditions: N/A
- Doins or Relationships: N/A
- **Variables Used**: None.
- **!** Warnings or Red Flags: None.
- **Suggestions for Improvement**: None.

Section Title: Customer Spend Summary

- What it does: Calculates the total spend for each customer.
- Data Source: Orders (RESIDENT).
- **Fields**: CustomerID, TotalSpend (calculated as the sum of TotalAmount).
- **©** Filters or Conditions: None.
- Doins or Relationships: None in this section.
- \ Variables Used: None.
- **A** Warnings or Red Flags: None.
- **Suggestions for Improvement**: None.

Section Title: Customer Spend Join

- What it does: Joins the Customer Spend to the Customers table.
- Data Source: Customer Spend (RESIDENT), and Customers (RESIDENT).
- **Fields**: All fields from Customers and Total Spend.
- **©** Filters or Conditions: None.
- **Joins or Relationships**: LEFT JOIN with the Customers table on CustomerID.
- **Variables Used**: None.
- <u>A</u> Warnings or Red Flags: None.
- Suggestions for Improvement: Consider calculating Total Spend in the initial Orders load and joining into Customers in one go.

Section Title: Drop CustomerSpend

- What it does: Drops the Customer Spend table.
- **Data Source**: Customer Spend (Table within the Qlik Model)
- **B** Fields: N/A
- **©** Filters or Conditions: N/A
- Doins or Relationships: N/A
- **Variables Used**: None.
- **A** Warnings or Red Flags: None.
- **Suggestions for Improvement**: None.

Final Summary

This script loads data from three CSV files: Customers, Products, and Orders. The script then calculates the total amount for each order by joining Products to the Orders data and multiplying quantity by price. Finally, it calculates the total spend per customer and joins this data into the Customers table.

- Main Tables: Customers, Products, and Orders (transformed).
- **Key KPIs**: TotalAmount (calculated at the order level) and TotalSpend (calculated per customer).
- **Data Refresh Logic**: The script performs a full load, meaning all data is loaded each time the script is run.
- **Redundant Loads**: The script could be optimized by joining product information directly in the orders load instead of using a resident load of Products. The final CustomerSpend calculation could be optimized as well.
- Overall Data Flow: Customers.csv → Customers; Products.csv → Products; Orders.csv → OrdersRaw → Orders (joined with Products and calculating TotalAmount) → CustomerSpend → Customers (joined with CustomerSpend).