Transforming Data

- Demonstration: Writing the CASE Expression

Transforming Data

- Demonstration: Writing the CASE Expression

  Using the **purchased_products** table, create a new column named **Financial_Quarter** that holds the correct quarter values for Orion Star's financial year. Because the Orion Star financial year starts December 1, the QUARTER function cannot be used, and quarters must be grouped as follows:

Quarter	Time Period
1	12-2 (December through February)
2	3-5 (March through May)
3	6-8 (June through August)
4	9-11 (September through November)

Transforming Data

- Demonstration: Writing the CASE Expression
    1. Add the **purchased_products** table to the project.
    2. Select **Query Builder** in the data grid. Name the query **Financial Quarters Query** and the data table **FinancialQuarters**.
    3. To begin creating **Month**, select **Computed Columns** > **New** > **Advanced Expression**. Click Next to open the Expression Editor.
    4. In the Expression Editor, expand the **Functions** folder, the **Categories** folder, and then the **Date and Time folder**.
    5. With the Date and Time folder, locate and double-click the **MONTH** function.

Transforming Data

- Demonstration: Writing the CASE Expression
  6. Select **Favorites** > **Tables**. Expand the **Purchased_Products** table and double-click **Order_Date**. It replaces <**datevalue**> in the Expression Editor.

  Enter an expression:

  MONTH(t1.Order_Date)

  7. Click **Next**. In the **Column Name** field, enter **Order_Month**.
  8. Click **Next** > **Finish**. **Order_Month** appears as a new column in the Computed Columns window.
  9. Select **New** > **Advanced Expression** > **Next** to open the Expression Editor a second time.
  10. In the Expression Editor, enter **case** on the first line and **when** on the second line. To enter the basic syntax for the CASE expression into the Expression Editor, expand **Functions** > **Categories** > **Conditional**. Double-click **CASE Expression**.

Transforming Data

- Demonstration: Writing the CASE Expression
  11. With the cursor after **when**, select **Computed Columns** to expand it, and double-click **Order_Month**. The expression used earlier to create Order_Month is repeated here. You can enter this directly into the Expression Editor instead of creating the Order_Month column.
  12. Finish the expression as shown below.

Enter an expression:

```
CASE
   WHEN (MONTH(t1.Order_Date)) in (12,1,2)  THEN 1
   WHEN (MONTH(t1.Order_Date)) in (3,4,5)  THEN 2
   WHEN (MONTH(t1.Order_Date)) in (6,7,8)  THEN 3
   WHEN (MONTH(t1.Order_Date)) in (9,10,11)  THEN 4
END
```

Transforming Data

- Demonstration: Writing the CASE Expression
  13. After completing the expression, select **Validate** to check the syntax. Click **Close**.
  14. After checking the syntax, click **Next** and enter **Financial_Quarter** in the **Column Name** field.
  15. Click **Next** > **Finish** > **Close**.
  16. Add and arrange the following columns on the Select Data tab so that they appear in this order: **Order_Date**, **Order_Month**, **Financial_Quarter**, **Order_ID**, **Product_Name**, **Total_Retail_Price**.
  17. Click **Run**.
  18. Save the project.