

Practice Level 1: Joining Data from Two Tables

In this practice, you use the Query Builder to create a table whose data results from a join of two tables.

1. If necessary, in the **Lesson4** project, add the **employee_master** and **employee_addresses** tables to the Practices process flow.
 - Select **File > Open** and navigate to the course data location.
 - Select **employee_master > Open**. The data appears on a new tab in the work area.
 - Select **File > Open** and navigate to the course data location.
 - Select **employee_addresses > Open**. The data appears on a new tab in the work area.
2. Use the Query Builder to join **employee_master** and **employee_addresses** to create a table named **payroll_location**.
 - Label the query **Payroll Location Join Query**.
 - Open the Tables and Joins window to verify that the join between the two tables is on the **Employee_ID** column.
 - Include the following columns in the order listed: **Employee_ID** (from the **employee_master** table), **Employee_Name** (from the **employee_master** table), **Birth_Date**, **Street_Number**, **Street_Name**, **City**, **State**, **Country**, and **Salary**.
 - In the process flow, hold down the Ctrl key and select **employee_master** and **employee_addresses**.
 - Right-click one of the two tables and select **Query builder**.
 - Enter **Payroll Location Join Query** in the Query name field.
 - Click **Change** next to the Output name field.
 - Enter **payroll_location** in the File name field and click **Save**.
 - Open the Tables and Joins window to verify that the join between the two tables is on the **Employee_ID** column.
 - Click **Join Tables** to open the Tables and Joins window.
 - Notice that an inner join on **Employee_ID** is being performed.
 - Click **Close**.
 - Double-click the following columns to select them: **Employee_ID** (from the **employee_master** table), **Employee_Name** (from the **employee_master** table), **Birth_Date**, **Street_Number**, **Street_Name**, **City**, **State**, **Country**, and **Salary**.
3. Apply the DOLLAR12.2 format to the **Salary** column and the DATE9. format to the **Birth_Date** column.
 - Select **Salary** and click the **Properties** icon to open the Properties window for the column.
 - Click **Change**.
 - In the Formats window, select **Currency** from the Categories pane and **DOLLARw.d** from the Formats pane.
 - Change the overall width to **12** and decimal places to **2**.
 - Click **OK > OK**.
 - Select **Birth_Date** and click the **Properties** icon to open the Properties window for the column.
 - Click **Change**.
 - In the Formats window, select **Date** from the Categories pane and **Datew.d** from the Formats pane.
 - Change the overall width to **9**.
 - Click **OK > OK**.
4. Create a new column named **Bonus** that represents 5% of the **Salary** column. Apply the DOLLAR12.2 format.

- Click the **Add A New Computed Column** icon on the Select Data tab.
 - In Step 1, select **Advanced expression** and click **Next**.
 - In Step 2, type or click to create the following expression:
`Salary * .05`
 - **Note:** If you select **Salary** rather than enter it in the expression, it's included as either **t1.Salary** or **t2.Salary**.
 - Click **Next**.
 - In Step 3, enter **Bonus** in the Column Name field.
 - Click **Change** next to the Format field.
 - Select **Currency** from the Categories pane and **DOLLARw.d** from the Formats pane.
 - Change the overall width to **12** and the decimal places to **2**.
 - Click **OK**.
 - Click **Next > Finish**.

5. Include only active employees or those that do not have a value for **Termination**. Sort the data by ascending **Employee_ID**.

- Click the **Filter Data** tab.
 - Drag **Termination** to the Filter Data tab. In Step 1, change the operator to **Is missing**.
 - Click **Finish**.
- Sort the data by ascending **Employee_ID**.
 - Click the **Sort Data** tab.
 - Drag and drop **Employee_ID** onto the **Sort Data** tab and verify that **Ascending** is the selected sort direction.

6. Run the query. What street does John Hornsey live on?

Click **Run** to execute the query. A new tab appears in the work area displaying the results. John Hornsey lives on *Sherwood Road*.

7. Close all tabs except for the process flow, and save the **Lesson4** project.

Hide Solution