Practice Level 1: Using the Summary Statistics Wizard

In this practice, you use the Summary Statistics Wizard to create a report that analyzes the salaries of all employees by **Department**. In addition, you export the output data to an Excel file as a step in the project.

1. In the **Lesson5** project, create a new process flow named **Practices** and add the **employee_master** table.

    - If necessary, select **File > New > Process flow**. **Note**: If you do not have the **Lesson5** project, select **File > New > Project** to create it.
    - Right-click the process flow in the Project pane and select **Rename**.
    - Enter **Practices** as the new name.
    - 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.

2. Use the Summary Statistics Wizard to create a report on the **Salary** column by **Department**.
    - Include the mean, minimum, maximum, and median salary for each group and round values to the nearest dollar.
      Hint: To find the median statistic, click the **Percentile** tab in the Edit Statistics window.
    - Create a SAS data set named **salary_stats** that includes the calculated statistics.
    - Enter **Summary Statistics for Salary by Department** as the title and delete the footnote.

    - Highlight the **employee_master** table in the Project pane or process flow.
    - In the Tasks pane, expand **Describe**, and double-click **Summary Statistics Wizard**.
        - In Step 1, verify the data and click **Next**.
        - In Step 2, drag **Salary** to the **Summary statistics of (Analysis variable)** role.
        - Drag **Department** into the **For each value of (Classification variable)** role.
        - Click **Next**.
    - Include the mean, minimum, maximum, and median salary for each group and round values to the nearest dollar.
        - In Step 3, designate the statistics to include in the report.
        - Click **Edit**.
            - On the Basic tab, clear the check boxes for **Standard deviation** and **Number of observations**.
            - Change the number of decimal places to **0** (zero).
            - Click the **Percentile** tab and select **Median**.
            - Click **OK**.
    - Create a SAS data set named **salary_stats** that includes the calculated statistics.
        - Continuing in Step 3, select the **Save statistics to data set** check box.
        - Click **Browse**.
        - Enter **salary_stats** in the File name field and click **Save**.
        - Click **Next**.
    - Enter **Summary Statistics for Salary by Department** as the title and delete the footnote.
        - In Step 4, delete the default analysis title and enter **Summary Statistics for Salary by Department**.
        - Delete the default footnote text.

3. Run the task. What is the minimum **Salary** value for the **Engineering** department?

    Click **Finish**. The results appear on a new tab in the work area. The minimum **Salary** for the **Engineering** department is *33306*.

4. Rename the task **Salary by Dept Summary**.

    - Right-click **Summary Statistics** in the Project pane and select **Rename**.

- Enter **Salary by Dept Summary**.

5. As a step in the project, export the output data to an Excel file named **SalaryStats.xlsx**. Store the output file in the **output** folder in the course file location.

    - Select **Share > Output Data > Export as a step in project** from the task toolbar.
        - In Step 1 of the Export Wizard, verify that **Summary Statistics for <*library*>.employee_master** is highlighted.
        - Click **Next**.
        - In Step 2, select **Microsoft Excel Workbooks (*.xlsx)** as the output file type.
        - Click **Next**.
        - In Step 3, select the **Use labels for column names** check box.
        - Click **Next**.
        - In Step 4, change the name of the output file.
            - Click Browse and navigate to the **output** folder in the course file location.
            - Enter **SalaryStats** in the File name field.
            - Select **Save**.
        - Click **Next** to review the export settings.
        - Click **Finish**. A new tab for the task appears, indicating that the **SalaryStats.xlsx** file was successfully exported.

6. Close all tabs except for the process flow, and save the **Lesson5** project. Notice that the Export File task was added to the process flow.

Hide Solution