**INSERT SUBTOTALS**

Subtotals are used to summarize data in a range of data. This command offers many kinds of summary information, including counts, sums, averages, minimums, and maximums. When this feature is used, a subtotal row is inserted into the range for each group of data. A grand total row is added at the end of the worksheet. Before the subtotals are inserted, the values in the column for which the subtotals are to be created must be sorted. The **Database Exercise** that you worked on earlier is used for this exercise.

**Sort the Data**

Sort the table by **Department**, if necessary.

- Place the insertion point somewhere in the **Department** field.
- Click the **Data Tab**.
- In the **Sort and Filter Group**, click the **Sort A to Z** button.
- The table will be sorted by **Department**.

**Convert the Table to a Range**

- Click the **Table Tools Design Tab**.
- In the **Tools Group**, click the **Convert to Range** button (see illustration below left).
- The dialog box as illustrated below right will appear.

- Click the **Yes** button.
  - The Excel table will be converted to a range.
  - The filter arrows will disappear.
  - The Table Tools Design tab will disappear.
  - The Home tab is selected.

**Calculate the Subtotals**

- Select **Cell A3**.
- Click the **Data Tab**.
- In the **Outline Group**, click the **Subtotal** button (see illustration at right).
- The **Subtotal** dialog box will appear (see illustration next page right).
- Click the **At each change in** list arrow, and then click **Department**.
- This will select the column that subtotals are to be inserted for.
- Click the **Use function** list arrow, and then click **Count**.
- In the **Add subtotal to** list box, click **Salary**, if necessary.
- Make sure the **Replace current subtotals** and the **Summary below data** check boxes are checked so the subtotals will appear below the related data.
- Click the **OK** button to display the subtotals for each department.
Organize Data into Levels
After subtotals have been added to the data, groups are defined based on the rows used to calculate a subtotal. The groupings form an outline of the worksheet based on the criteria used to create the subtotals. The outline section holds controls that are used to hide or display groups of rows in the worksheet. There are three types of controls in the outline section: **Hide Detail Buttons**, **Show Detail Buttons**, and **Level Buttons**.

**Display Levels**

† Click the **Outline Dialog Box Launcher**. This button appears in the bottom right corner of the **Outline Group** (see illustration at right).

† The **Settings** dialog box will display (see illustration below).

† Make sure the first two check boxes are selected.

† Click the **Create** button.
The Levels area will appear on the left side of the table that contains the subtotals.

The buttons in the Levels area are described in the table below.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HideDetail</td>
<td>This button is used to hide the rows in a group, such as hiding the detail information for each department.</td>
</tr>
<tr>
<td>ShowDetail</td>
<td>After a group of data has been hidden, this button will be displayed. When this button is clicked, the detailed information about the groups for which subtotals were created will be displayed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>This button shows the grand total of the items in the worksheet.</td>
</tr>
<tr>
<td>2</td>
<td>This button shows the subtotals that were inserted into the worksheet along with the Grand Total.</td>
</tr>
<tr>
<td>3</td>
<td>This button re-displays all the data in the worksheet.</td>
</tr>
</tbody>
</table>

**Insert Page Breaks From the Page Layout Ribbon**

- Scroll down to the row below the first subtotal.
- With the insertion point in that row, click the Page Layout Tab.
- In the Page Setup Group, click the Breaks button (see illustration below).

- Click Insert Page Break from the list that appears.
- A dotted line will appear before the selected row indicating that a Page Break has been inserted.

**Remove Page Break**

- With the insertion point in the same row, click the Page Layout Tab, if necessary.
- In the Page Setup Group, click the Breaks button.
- Choose Remove Page Break from the list.

**Insert Page Breaks from Subtotals Dialog Box**

Page Breaks allow you to print sections of a worksheet on separate pages.

- While still in the database, click the Data Tab.
- In the Outline Group, click Subtotals (see illustration at right).
- In the Subtotals dialog box, click the Page Break between groups check box (see illustration on next page).
- Click the OK button.
- A dotted line will appear between each group indicating where the Page Breaks are located.
- Click the File Tab.
- Click the Print option to preview the worksheet.
- Click the Next and Previous buttons to move from one sheet to another.
Click the **Home Tab** or press the **Esc** key to return to **Normal View**.

**Print Row Column Headings on Each Page**

- Click the **Print Layout Tab**.
- In the **Page Setup Group**, click the **Print Titles** button (see illustration below).

- The **Page Setup** dialog box will display with the **Sheet** tab selected (see illustration on next page).
- In the **Print Titles Section**, click the **Collapse** button for the **Rows to repeat at top** option or the **Columns to repeat at left** option. These are the **Red** buttons at the end of the box.
- The dialog box will collapse as shown in the bottom illustrations on the next page.
- Select the rows or columns that are to be printed on each page.
- The row numbers should appear in the box with a dollar sign before each number and a colon in between the numbers.
- For instance, if you selected rows 1 through 3, $1:$3 would appear in the box.
- Click the **Expand (Red)** button at the end of the **Page Setup – Rows to Repeat at Top** or the **Page Setup – Columns to Repeat at Left** box.
- Click the **Print Preview** button in the **Page Setup** dialog box to view the pages of the worksheet.
- The **Print Preview and Print** page will open in **Backstage View**.
Click the Next Page button to view each of the pages.

Click Page Setup at the bottom of the page.

Change some of the other options, such as Gridlines or Row and column headings to see what happens with the preview.

After looking at each of these options, click the Home Tab or press the Esc key to return to the worksheet.