

# Reports

# 13

## *In this chapter you will learn:*

- How to Use a query to create a report
- How to Use grouping and summarizing in a report
- How to Modify an existing report design
- How to Export a report to MS Word and/or Excel

## **Case: What SUP, Inc.**

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You, Nathan, and Meagan are feeling rather confident in using Access. So far you've created and modified tables, queries, and forms in your database, but you are anxious to see some results of your work in a more formal presentation.

"How are reports different from queries and forms?" Meagan asks.

"Remember that forms are used to view and update information in the database," Kyle answers. "Queries are your means of asking questions about the data, and reports are your means of expressing that information in a usable fashion."

He reminds you that, when exploring queries, you were able to use select, update, and delete queries to locate certain information and were also able to compute totals and statistics. However, those queries when printed were not formatted very well. Although they could be sorted, they didn't have the header, footer, grouping, or summarizing features of reports.

Kyle suggests that you start with using a query as your basis for a report and as a means to learn more about the available reporting features of Access.

## **Use a Query to Create a Report**

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To demonstrate the use of queries in a report, Kyle created a simple select query that lists the category id, product name, quantity, unit cost, and total cost of all products in inventory. We can now create a report using this query. The first question he asks is what information from this query needs to be displayed in a report.

"Well, if you ask me," says Nathan, "I'd like to see a report of our products sorted alphabetically by product name. And I'd like to see each product's quantity, unit cost, and total cost."

"Could we also add information to the report like the category name for each item?" Meagan asks.

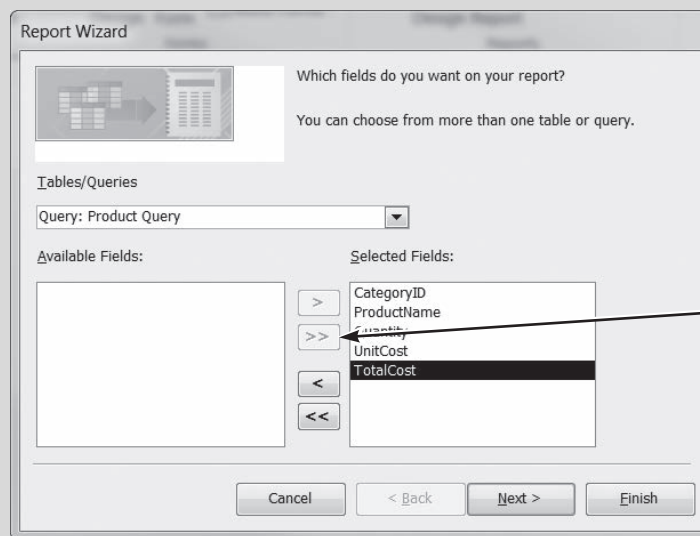
"Sure," Kyle responds.

He then explains the process for creating such a report and offers to demonstrate it to you now.

### To create a report using a query:

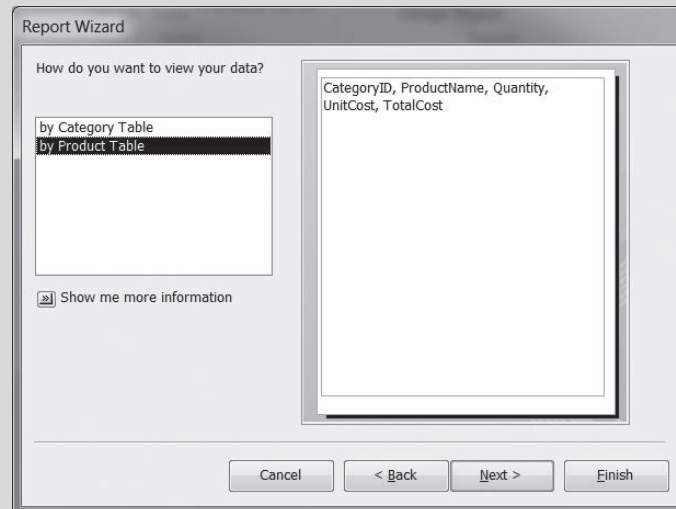
- 1 Start Access.
- 2 Click the **File** tab and then click **Open**.
- 3 Navigate the Open window to the location of this text's student files. (The location would be the CD provided with the text or from your computer lab's server.)
- 4 Double-click **ch13-01**, which should be located in a Ch 13 folder. (This is a modified version of the completed What SUP Inventory file from previous chapters.)
- 5 Click the **File** tab and then click **Save Database As**.
- 6 Navigate the Save As window to the location where you wish to save this file and type **Ch13-01\_student\_name** in the File Name: text box (replacing student\_name with your name).
- 7 Click **Save**.
- 8 Click **Report Wizard** in the Reports group of the Create tab on the Ribbon. Click **Open** to bypass the security warning if need be.
- 9 Select **Query: Product Query** from the Tables/Queries drop-down list.
- 10 Click **>>** to select all fields for inclusion into this report, as shown in Figure 13.1.

**Figure 13.1**  
Creating a Report Using  
the Report Wizard



Click here to move  
all available fields  
across

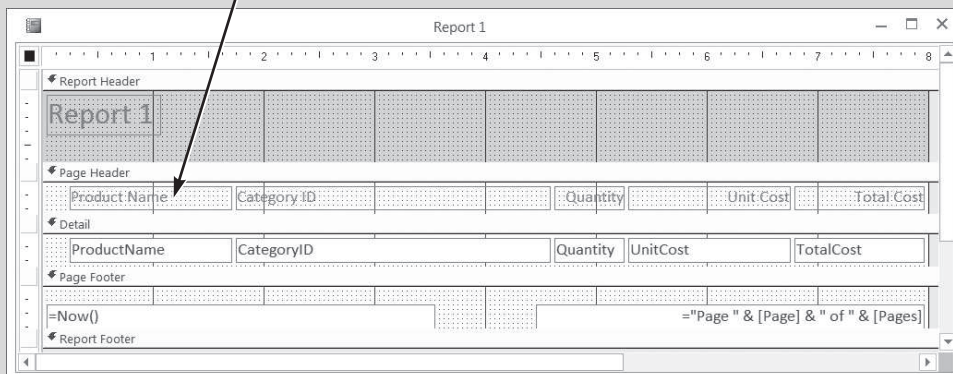
- 11 Click **Next**.
- 12 Click **by Product Table** to remove the automatic grouping (more on this later), as shown in Figure 13.2.
- 13 Click **Next** two times, then select **Product Name** from the drop-down list 1 when asked about sorting; this will sort your report by product name.



**Figure 13.2**  
Using the Report Wizard

- 14** Click **Next**; then check the Adjust the field width check box so that all fields fit on a page.
- 15** Click **Tabular** under the Layout section and **Portrait** under the Orientation section; then click **Next**.
- 16** Type **Report 1** as the title of your report, click the **Modify the report's design** option button, and then click **Finish**. Your window should look like Figure 13.3.

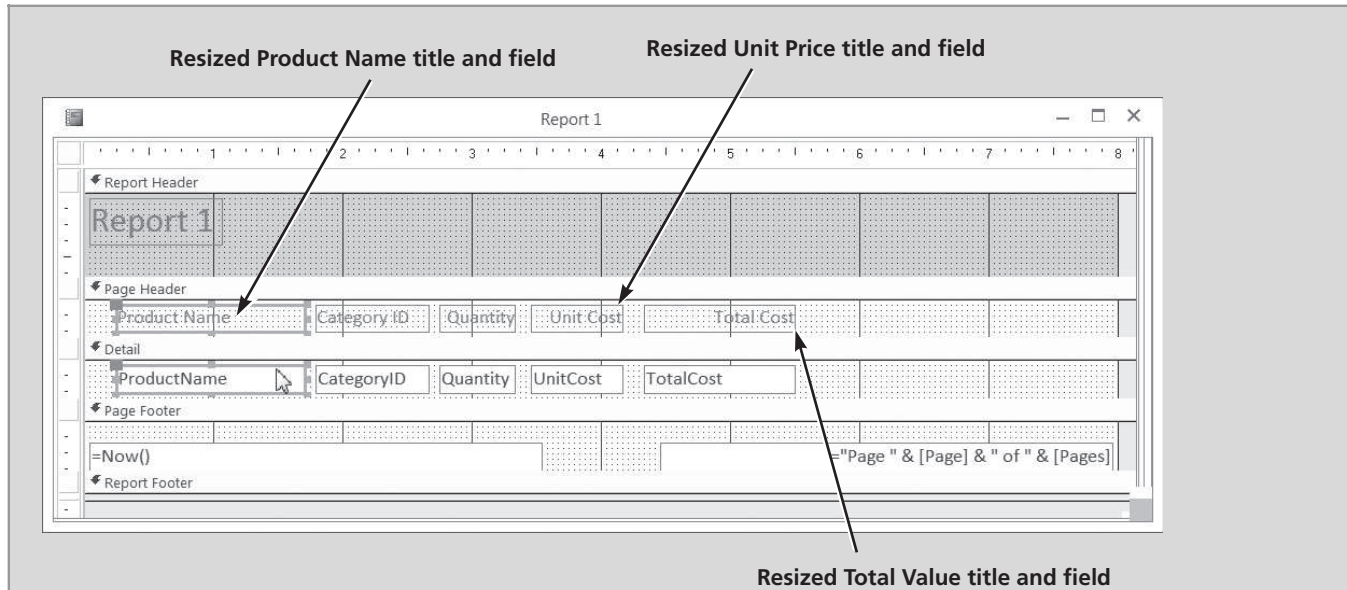
Click on the far right of this text box and you should see a two arrow size cursor. Click and drag to the right to increase the width of the text box. Click on the top of the text box to see a four arrow move cursor. Click and hold here to relocate a text box.



**Figure 13.3**

Design View of Report 1

- 17** Resize the Product Name, Category ID, Quantity, Unit Cost, and Total Cost fields and titles as shown in Figure 13.4.

**Figure 13.4**

Modified Design View of Report 1

- 18** Click **View** and then click **Report View**. The top of your finished report, created from a query, should look like Figure 13.5.

Product Name	Category ID	Quantity	Unit Cost	Total Cost
Badfish	D	5	\$450.00	\$2,250.00
Badfish 2	E	2	\$550.00	\$1,100.00
BW Hybrid	F	15	\$160.00	\$2,400.00
Candice Appleby	C	1	\$950.00	\$950.00
Glide GS	C	8	\$850.00	\$6,800.00
Makani	F	12	\$150.00	\$1,800.00
Nalu	A	3	\$850.00	\$2,550.00
Nalu Air	B	4	\$650.00	\$2,600.00
Ridley	D	3	\$1,350.00	\$4,050.00
Ripper	D	6	\$1,600.00	\$9,600.00
Shubu X	B	3	\$550.00	\$1,650.00

**Figure 13.5**

Top Portion of Report 1

**19** Close the report and click **Yes** to save changes.

Kyle further explains that it is best to create a report from a query that has all the information you need. Kyle suggests that you learn more about reports by working on grouping and summarizing information.

## **Use Grouping and Summarizing in a Report**

Kyle explains that *grouping* arranges the records in your report. When you group records, each group that shares a common characteristic is displayed together. You can group based on one or several characteristics. Furthermore, Kyle explains that—once a report has groups assigned—those groups can be summarized in many ways, including subtotals, grand totals, average, and so on.

“Can I get a report that lists my inventory by category and also subtotals each group?” Nathan asks.

“Sure,” says Kyle. “But I suggest we learn how to group first and then worry about summarizing later.”

### **Grouping**

“Let’s create a report similar to the one we just created but grouped by category name,” suggests Kyle.

#### **To create a report using grouping:**

- 1** Click **Report Wizard** in the Reports group of the Create tab on the Ribbon.
- 2** Select **Query: Product Query** from the Tables/Queries drop-down list.
- 3** Click >> to select all fields for inclusion in this report.
- 4** Click **Category ID** in the Selected Fields section, then click < to remove the Category ID field from the list.
- 5** Select **Table: Category Table** from the Tables/Queries drop-down list.
- 6** Double-click **Category Name** to add that field to the Selected Fields list. (*Note:* It should appear just below ProductName.)
- 7** Click **Next** and then double-click **CategoryName** to add a grouping level.
- 8** Click **Next**.
- 9** Select **Product Name** from the drop-down list 1 when asked about sorting; this will sort your report by product name.

- 10** Click **Next**; then check the Adjust the field width check box so that “All fields fit on a page.”
- 11** Click **Stepped** under the Layout section and **Portrait** under the Orientation section; then click **Next**.
- 12** Type **Report 2** as the title of your report and then click **Finish**. Your window should look like Figure 13.6.

Report 2				
CategoryName	Product Name	Quantity	Unit Cost	Total Cost
Flatwater	Nalu	3	\$850.00	\$2,550.00
	Veneer Raven	2	\$750.00	\$1,500.00
Inflatable	Nalu Air	4	\$650.00	\$2,600.00
	Shubu X	3	\$550.00	\$1,650.00
Paddles	BW Hybrid	15	\$160.00	\$2,400.00
	Makani	12	\$150.00	\$1,800.00
Race	Candice Appleby	1	\$950.00	\$950.00
	Glide GS	8	\$850.00	\$6,800.00
	Sleeping One	4	\$1,150.00	\$4,600.00
River				

**Figure 13.6**

Partial View of Report 2

- 13** Close the report.

“Is it possible to group more than once?” Meagan asks.

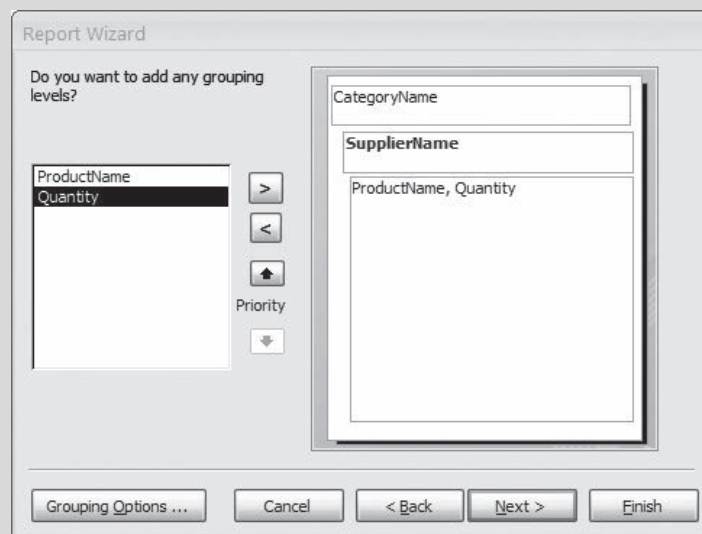
“Yes,” explains Kyle. “Access will let you group on any number of fields.”

He suggests you create a report listing the product name and quantity by category and by supplier. In this way you can see what products are in each category as well as which suppliers provide them.

### To create a report using multiple field grouping:

- 1** Click **Report Wizard** in the Reports group of the Create tab on the Ribbon.
- 2** Select **Table: Product Table** from the Tables/Queries drop-down list.

- 3** Double-click **ProductName** and **Quantity** from the list of available fields.
- 4** Select **Table: Category Table** from the Tables/Queries drop-down list.
- 5** Double-click **Category Name** from the list of available fields.
- 6** Select **Table: Supplier Table** from the Tables/Queries drop-down list.
- 7** Double-click **Supplier Name** from the list of available fields; then click **Next**.
- 8** Click **by Category Table** as your data view and then click **Next**.
- 9** Double-click **Supplier Name** to add a grouping level. Your window should look like Figure 13.7.

**Figure 13.7**

Multiple Grouping Levels

- 10** Click **Next** and then select **Product Name** from the drop-down list 1 when asked about sorting; this will sort your report by product name.
- 11** Click **Next**; then check the Adjust the field width check box so that "All fields fit on a page."
- 12** Click **Stepped** under the Layout section and **Portrait** under the Orientation section; then click **Next**.

- 13** Type **Report 3** as the title of your report and then click **Finish**. Modify the size of each field so that your report looks like Figure 13.8.

Report 3			
Category Name	SupplierName	Product Name	Quantity
Flatwater			
	Boardworks	Veneer Raven	2
Naish			
		Nalu	3
Inflatable			
	Boardworks	Shubu X	3
Naish			
		Nalu Air	4
Race			

**Figure 13.8**

Partial View of Report 3

- 14** Save and then close the report.

“I can imagine all sorts of reports I would like to generate in our business,” says Meagan. “But you said we could summarize as well, right?”

“Correct,” Kyle responds. “Let me introduce you to the summarizing process.”

## Summarizing

Kyle explains that Access will automatically provide summaries on numeric fields in your report if you use the Report Wizard and establish groups. He tells you that a group is a collection of records, along with any introductory and summary information displayed with the records, such as a header. A group consists of a group header, nested groups (if any), detail records, and a group footer. Grouping allows you to separate groups of records visually and to display introductory and summary data for each group. The available functions include summation, average, minimum, and maximum. Access will also calculate the percent of total for sums if you like.



“It’s important to remember that Access won’t let you sum text or other non-numeric fields, for obvious reasons,” says Kyle. “So if you accidentally set up a field in a table that contains numeric values but identify the field as a data type other than number, you won’t be able to use the summary features.”

He suggests creating a product value by category report that sums the total value of products in each category.

### To create a report using grouping and summary options using the Report Wizard:

- 1 Click **Report Wizard** in the Reports group of the Create tab on the Ribbon.
- 2 Select **Query: Product Query** from the Tables/Queries drop-down list.
- 3 Double-click **ProductName**, **Quantity**, **UnitCost**, and **TotalCost** from the list of available fields.
- 4 Select **Table: Category Table** from the Tables/Queries drop-down list.
- 5 Double-click **CategoryName** from the list of available fields; then click **Next**.
- 6 Double-click **CategoryName** as your group level, and then click **Next**.
- 7 Click **ProductName** from the drop-down list 1 when asked about sorting; this will sort your report by product name.
- 8 Click the **Summary Options** button in the Report Wizard box.
- 9 Click **Sum** on the TotalCost row to direct Access to add the total value of each product by group.
- 10 Click **OK** in the Summary Options window.
- 11 Click **Next**; then check the Adjust the field width check box so that “All fields fit on a page.”
- 12 Click **Stepped** under the Layout section and **Portrait** under the Orientation section; then click **Next**.
- 13 Type **Report 4** as the title of your report and then click **Finish**. Modify the size of each field so that your report looks like Figure 13.9.

Report 4				
CategoryName	Product Name	Quantity	Unit Cost	Total Cost
<b>Flatwater</b>				
	Nalu	3	\$850.00	\$2,550.00
	Veneer Raven	2	\$750.00	\$1,500.00
Summary for 'CategoryName' = Flatwater (2 detail records)				
	Sum			####
<b>Inflatable</b>				
	Nalu Air	4	\$650.00	\$2,600.00
	Shubu X	3	\$550.00	\$1,650.00
Summary for 'CategoryName' = Inflatable (2 detail records)				
	Sum			####
<b>Paddles</b>				
	BW Hybrid	15	\$160.00	\$2,400.00
	Makani	12	\$150.00	\$1,800.00
Summary for 'CategoryName' = Paddles (2 detail records)				
	Sum			####

**Figure 13.9**

Partial View of Report 4

**14** Close Print Preview but leave the Report window open.

Kyle further explains the nature of the report just generated. In addition to the total provided for each category, the report created a grand total value of all products (see again Figure 13.8). However, the description of the summary amount is a bit odd, and the value amounts are shown as ####.

“To help you understand how this summary was created, I think it’s best to show you the Report Design view of this report,” Kyle suggests. “Let’s open up the report, take a look, fix these problems, and print the report.”

**To examine the sum functions created in the previous report and then print the report:**

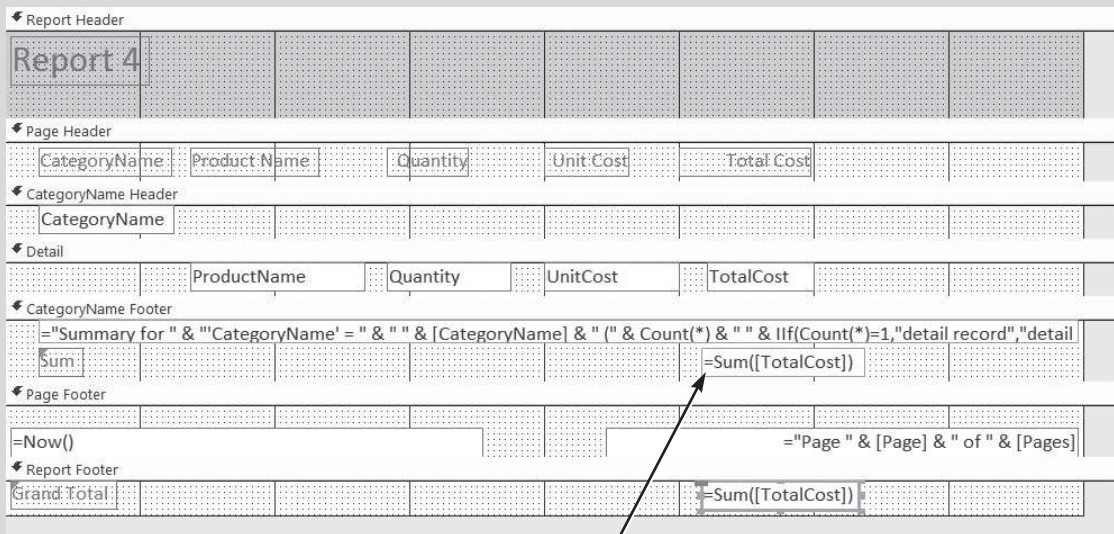
- 1 Click **View** and then **Design View** to view the design view of Report 4, as shown in Figure 13.10.

Sum label control in the CategoryID footer

Sum control in the CategoryID footer

**Figure 13.10**  
Design View of Report 4

- 2 Note the Sum label control and the =Sum([TotalCost]) formula in a text box control, both located in the Category ID footer.
- 3 Also note the Grand Total label control and the =Sum([TotalCost]) formula in a text box control, both located in the Report footer.
- 4 Click the left side of both Sum controls and drag to the left to increase their size, as shown in Figure 13.11.
- 5 Right-click the =Sum([TotalCost]) control in the Category ID footer; then click **Properties** to reveal the Property Sheet window.
- 6 Click the **All** tab to view the Property Sheet window, as shown in Figure 13.12.
- 7 Observe that the formula in the Control Source section of the Properties window contains the formula to sum the TotalCost field of the report.
- 8 Close the Properties window.
- 9 Click **View** and then click **Report View**.



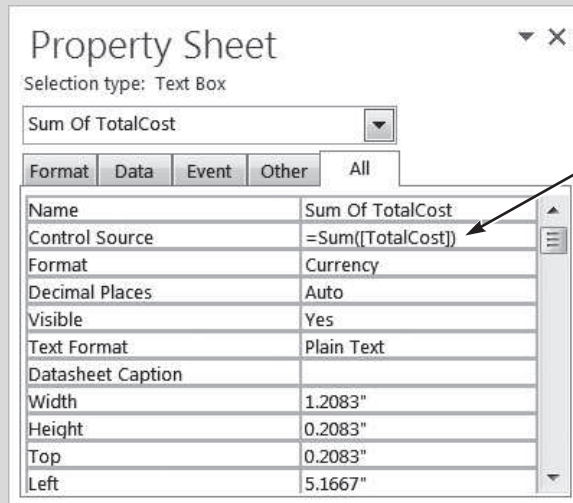
Click and drag the Sum control in the CategoryID footer to make it larger

**Figure 13.11**

Increasing the Size of a Report Control

**Figure 13.12**

Partial View of the Properties Window of the Sum([TotalCost]) Control



Control Source Formula

- 10** Click the **File** tab, click **Print**, click **Print** again, and then click **OK** to print the report. It should look like Figure 13.13.
- 11** Close the Report window. Click **Yes** to save the changes.

## Report 4

CategoryName	Product Name	Quantity	Unit Cost	Total Cost
<b>Flatwater</b>				
	Nalu	3	\$850.00	\$2,550.00
	Veneer Raven	2	\$750.00	\$1,500.00
Summary for 'CategoryName' = Flatwater (2 detail records)				
	Sum			\$4,050.00
<b>Inflatable</b>				
	Nalu Air	4	\$650.00	\$2,600.00
	Shubu X	3	\$550.00	\$1,650.00
Summary for 'CategoryName' = Inflatable (2 detail records)				
	Sum			\$4,250.00
<b>Paddles</b>				
	BW Hybrid	15	\$160.00	\$2,400.00
	Makani	12	\$150.00	\$1,800.00
Summary for 'CategoryName' = Paddles (2 detail records)				
	Sum			\$4,200.00
<b>Race</b>				
	Candice Appleby	1	\$950.00	\$950.00
	Glide GS	8	\$850.00	\$6,800.00
	Sleeping One	4	\$1,150.00	\$4,600.00
Summary for 'CategoryName' = Race (3 detail records)				
	Sum			\$12,350.00
<b>River</b>				
	Badfish 2	2	\$550.00	\$1,100.00
	Zoomer	5	\$1,800.00	\$9,000.00
Summary for 'CategoryName' = River (2 detail records)				
	Sum			\$10,100.00
<b>Surf</b>				
	Badfish	5	\$450.00	\$2,250.00
	Ridley	3	\$1,350.00	\$4,050.00
	Ripper	6	\$1,600.00	\$9,600.00
Summary for 'CategoryName' = Surf (3 detail records)				
	Sum			\$15,900.00

Figure 13.13

Printed Report 4

“Placement of these controls determines what gets summed,” Kyle explains. “The first control, placed in the CategoryName footer, sums the total value for each category, while the second control, placed in the report footer, sums the total value for the whole report.”

“Why is Total Value in brackets?” asks Meagan, “and why are the sum amounts and totals without commas, dollar signs or full decimals?”

“The brackets indicate that a field name is being used in a formula,” explains Kyle. “The Sum function will sum all the fields named Total Value located within the CategoryName detail section. The formatting of the controls is something we can take care of next.”

Kyle now advises you to learn more about reports by modifying an existing report.

## Modify an Existing Report

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Not all reports you create with the Report Wizard will look the way you want or present the information you need. It is therefore important that you be able to modify an existing report. Kyle has explained how placement of controls in the various sections of a report dictate the information displayed. He suggests that you learn about each report section by creating controls to count and sum and then modifying the properties of those controls.

## Counting and Summing in Report Sections

Kyle explains that all reports have a detail section, but a report can also include a report header, a page header, a group header, group footer, page footer, and a report footer section. Each section has a specific purpose and prints in a predictable order in the report.

In Design view, sections are represented as bands, and each section that the report contains is represented once. In a printed report, some sections might be repeated many times. You determine where information appears in every section by placing controls such as labels and text boxes.

The *Report header* appears once at the beginning of a report. You can use it for items such as a logo, report title, or print date. The Report header is printed before the Page header on the first page of the report. The *Page header* appears at the top of every page in the report; you use it to display items such as column headings. The *Detail section* contains the main body of a report's data. This section is repeated for each record in the report's underlying record source. The *Page footer* appears at the bottom of every page in the report; you use it to display items such as page numbers. The *Report footer* appears once at the end of the report. You use it to display items such as report totals. The Report footer is the last section in the report design but appears before the Page footer on the last page of the printed report.

Kyle explains that the CategoryName footer generated by the Report Wizard created a text box control for this report that specified not only which CategoryName was being totaled but also how many detail records were in each category section. This was accomplished by using the field name in the control and using the Count function to add up the number of detail records in each

category section. The CategoryName Header describes the field information being grouped below it. In this case you chose to group information by CategoryName. Alternatively, you could have chosen to group the product information by buyer name or supplier name for example.

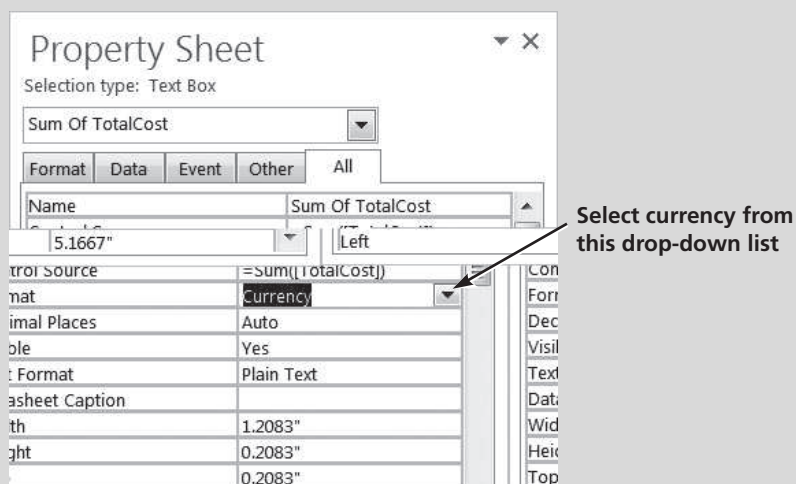
The formula used in the text box control was ="Summary for " & "'Category ID' = " & " " & [CategoryName] & " (" & Count(\*) & " " & Iif(Count(\*)=1,"detail record","detail records") & ")". In the report, this text box control printed the following result for the first category: "Summary for 'CategoryName' = 1 (5 detail records)". The most important part of the formula is the function Count. To count records in a section, the formula Count (\*) is used. The & symbol is used to separate text from fields, and the Iif function changes the final text to read either record or records, depending on whether one or more records were counted.

The CategoryName footer also included a text box control to sum the total value for each category (note that the Report footer included the identical text box control). The placement of the control in the CategoryName footer caused the control to calculate the total value for each category, while the control placed in the Report footer caused that control to calculate the total value for the entire report.

"Why don't you use the report you just created to experiment on modifying report sections by adding a control to sum the quantity of each category and adding a control to count all detail records in the entire report?" Kyle suggests.

### To modify report sections to sum and count:

- 1 Right-click **Report 4** and then click **Design View**.
- 2 Right-click the **Sum Of TotalCost** control in the CategoryName footer, click **Properties**, and note that the format is set to Currency by clicking the Format drop-down list as shown. Currency (see Figure 13.14).

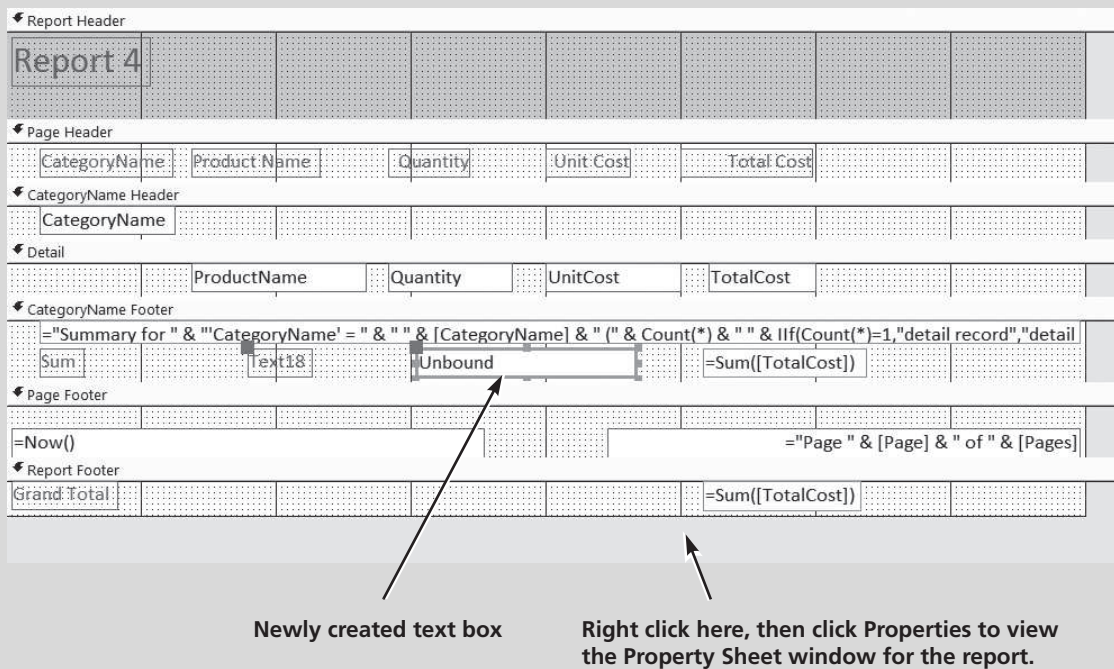


**Figure 13.14**

Formatting the Sum Control

- 3 With the Property Sheet still open, click the Sum control in the Report footer and note that the format of this control is also already set to currency.

- 4 Close the Property Sheet window.
- 5 Select the **Textbox** button in the Controls group of the Design tab of the Ribbon.
- 6 Click and drag your mouse in the CategoryName footer to create a new text box control, as shown in Figure 13.15.



**Figure 13.15**

Creating a New Control in a Report

- 7 Click inside the new text box control (labeled Unbound) and type **=Sum([Quantity])**.
- 8 Delete the new text box control label by clicking in the upper left corner of the label, and then press the [**Delete**] key.
- 9 Move and resize the newly created text box to line up with Quantity in the detail section.
- 10 Click the top of the **Grand Total** label control in the Report footer to see a move cursor; then, holding the mouse button down, move the label to the right and place it next to the Grand Total amount.
- 11 Type **Report 5** in the Report header, replacing the old title Report 4.
- 12 Click the **File** tab, click **Save As**, then click **Save Object As**, then click **Save As**, then type **Report 5** as the title and then click **OK**.
- 13 Right-click in the bottom section of the Design view under the Report footer and click **Properties** to display the Property Sheet.
- 14 Type **Report 5** as the caption, replacing the text Report 4.



- 15 Select the **Textbox** button in the Controls group of the Design tab of the Ribbon.
- 16 Click and drag your mouse in the Report footer to create a new text box control.
- 17 Click inside the new text box control (labeled Unbound) and type **=Count(\*)**.
- 18 Type **Total detail records** in the new text box control label.
- 19 Move and resize the newly created text box to line up with records count in the detail section.
- 20 Click **View** and then click **Layout View**. (This allows you to see the report in a view with the data provided and often makes it easier to align fields and labels.)
- 21 Click **View** and then **Report View**, and then scroll to the bottom of the report. Your screen should look like Figure 13.16.

Race				
	Candice Appleby	1	\$950.00	\$950.00
	Glide GS	8	\$850.00	\$6,800.00
	Sleeping One	4	\$1,150.00	\$4,600.00
Summary for 'CategoryName' = Race (3 detail records)				
Sum		13		\$12,350.00
River				
	Badfish 2	2	\$550.00	\$1,100.00
	Zoomer	5	\$1,800.00	\$9,000.00
Summary for 'CategoryName' = River (2 detail records)				
Sum		7		\$10,100.00
Surf				
	Badfish	5	\$450.00	\$2,250.00
	Ridley	3	\$1,350.00	\$4,050.00
	Ripper	6	\$1,600.00	\$9,600.00
Summary for 'CategoryName' = Surf (3 detail records)				
Sum		14		\$15,900.00
Total detail records		14	Grand Total	\$50,850.00

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**Figure 13.16**

Bottom Half of Report 5 in Report View

- 22 Close the report, saving your changes.

Having added controls to Count records and Sum different values, it is now time to modify various properties of those controls like borders, lines, fonts, and so forth.

## Lines, Borders, and Formatting in Report Sections

Access allows you to modify reports by adding lines and modifying properties of existing controls like the font name, size, and weight. Kyle suggests that you and Nathan look over the report you just modified and determine what changes you think would add to its look and usefulness.

“I think it would be nice to better separate each category section with a line,” Nathan comments, “and get rid of that border around the grand total.”

“I agree,” you respond. “We should also have a line above each total for the sum of watches, earrings, et cetera. Plus I would like to change the font style of the controls in the Report footer to Times New Roman, size 10, bold, and italicized.”

“How about making the total cost of each category look like currency?” Meagan suggests.

“Go for it!” Kyle exclaims.

### To add lines, modify borders, and change formatting:

- 1 Right-click **Report 5** and then click Design View.
- 2 Type **Report 6** in the Report header, replacing the old title Report 5.
- 3 Click the **File** tab and then click **Save As**, then click **Save Object As**, then click **Save As**, then type **Report 6** as the title and then click **OK**.
- 4 Right-click in the grayed-out section of the Design view under the Report footer and click **Properties** to display the Property Sheet.
- 5 Type **Report 6** as the caption, replacing the text Report 5; then close the Property Sheet.
- 6 Click at the top of the Page Footer separator and then with the left-mouse button held down, drag down to increase the size of CategoryName Footer. You may also need to move the Sum label, and two sum controls down a bit and then click the **Line** tool located in the Controls group of the Design tab of the Ribbon.
- 7 Click and drag the mouse cursor from just under the label Sum in the CategoryName footer to just under the lower right corner of the =Sum([Total]) text box. A line should appear.
- 8 With the line selected, click the **Format** tab of the Report Design Tools section and then select the **Shape Outline** drop-down list, and then select **Line Type** and then select **Solid** (it may already be solid).
- 9 With the line still selected, click the **Format** tab of the Report Design Tools section and then select the **Shape Outline** drop-down list, and then select **Line Thickness** and then select **1 pt**.

- 10** With the line still selected, click the **Format** tab of the Report Design Tools section and then select the **Shape Outline** drop-down list, and then select a black square to select a color for the line (it may already be black).
- 11** Click the **Line** tool again.
- 12** Add a short line just above the =Sum([Quantity]) control in the Category ID footer. A line should appear. Format the line in the same manner as above.
- 13** Click **View** and then **Layout View**. Your screen should look like Figure 13.17.

Line added here

CategoryName	Product Name	Quantity	Unit Cost	Total Cost
<b>Flatwater</b>				
	Nalu	3	\$850.00	\$2,550.00
	Veneer Raven	2	\$750.00	\$1,500.00
Summary for 'CategoryName' = Flatwater (2 detail records)				
Sum		5		\$4,050.00
<b>Inflatable</b>				
	Nalu Air	4	\$650.00	\$2,600.00
	Shubu X	3	\$550.00	\$1,650.00
Summary for 'CategoryName' = Inflatable (2 detail records)				
Sum		7		\$4,250.00
<b>Paddles</b>				
	BW Hybrid	15	\$160.00	\$2,400.00
	Makani	12	\$150.00	\$1,800.00
Summary for 'CategoryName' = Paddles (2 detail records)				
Sum		27		\$4,200.00

Line added here

**Figure 13.17**

Adding Lines to Report 6

- 14** Type **Products by Category** (in place of Report 6) in the Report header.
- 15** Click **Save** in the Quick Access toolbar to save changes to Report 6.
- 16** Click the **File** tab, click **Print**, and then click **Print** again.
- 17** Click **OK** in the Print window to print your report. The printed report should look like Figure 13.18.

Products by Category				
CategoryName	Product Name	Quantity	Unit Cost	Total Cost
<b>Flatwater</b>				
	Nalu	3	\$850.00	\$2,550.00
	Veneer Raven	2	\$750.00	\$1,500.00
Summary for 'CategoryName' = Flatwater (2 detail records)				
Sum		5		\$4,050.00
<b>Inflatable</b>				
	Nalu Air	4	\$650.00	\$2,600.00
	Shubu X	3	\$550.00	\$1,650.00
Summary for 'CategoryName' = Inflatable (2 detail records)				
Sum		7		\$4,250.00
<b>Paddles</b>				
	BW Hybrid	15	\$160.00	\$2,400.00
	Makani	12	\$150.00	\$1,800.00
Summary for 'CategoryName' = Paddles (2 detail records)				
Sum		27		\$4,200.00
<b>Race</b>				
	Candice Appleby	1	\$950.00	\$950.00
	Glide GS	8	\$850.00	\$6,800.00
	Sleeping One	4	\$1,150.00	\$4,600.00
Summary for 'CategoryName' = Race (3 detail records)				
Sum		13		\$12,350.00
<b>River</b>				
	Badfish 2	2	\$550.00	\$1,100.00
	Zoomer	5	\$1,800.00	\$9,000.00
Summary for 'CategoryName' = River (2 detail records)				
Sum		7		\$10,100.00
<b>Surf</b>				
	Badfish	5	\$450.00	\$2,250.00
	Ridley	3	\$1,350.00	\$4,050.00
	Ripper	6	\$1,600.00	\$9,600.00
Summary for 'CategoryName' = Surf (3 detail records)				
Sum		14		\$15,900.00
Total detail records		14	Grand Total	\$50,850.00

**Figure 13.18**

Printed Products by Category Report

**18** Close the report window.

“Wow, that was a lot of work,” Meagan complains. “Why can’t the Report Wizard do all this for us in the first place?”

“Good question,” Kyle answers. “Reports have so many variations that the Report Wizard can only begin to create reports. The rest is up to us!”

## End Note

In this chapter you have learned how to use a query to create a report, how to use grouping and summarizing to enhance a report’s usefulness, and how to modify a previously generated report so that it will be more useful. Now you are ready to take on the world and create your own solutions to database organization and reporting problems.

## Chapter 13 Questions

- 1 Why create a report from a query? Why not just print your query results?
- 2 Can you always add a field from any table to a report based on a query?
- 3 When creating a report, what does grouping accomplish?
- 4 When creating a report, what does the process of summarizing accomplish?
- 5 Is it possible to group more than one item?
- 6 What do the [ ] (brackets) signify in an Access formula?
- 7 How do you determine where information appears in a report?
- 8 What type of control is used in a report to add values?
- 9 What function is used (and how is it written) to count records in a report?
- 10 Describe the process of adding lines to a report.

## Chapter 13 Assignments

- 1 Using the Ch13-02 file, create a report using all the fields present in the Buyer Query. View the data by Product Table with no grouping or summarization in a portrait orientation and adjusting the field width so all fields fit on a page. Title and save the new report as Ch 13 Assignment 1. Print the new report.
- 2 Create a report using the BuyerName, ProductName, Quantity, UnitCost, and TotalCost fields present in the Buyer query. View the data by Buyers Table and group by BuyerName. Use the summary option feature of Access to the sum TotalCost, showing detail and summary in a stepped layout with portrait orientation and adjusting the field width so all fields fit on a page. Title and save the new report as Ch 13 Assignment 2. Make sure all values are visible, and then print the new report.
- 3 Open the report created in Assignment 2. Change the title of the report to Products by Buyer. Add lines to separate each buyer. Add a line above the grand total amount. Save the new report as Ch 13 Assignment 3. Make sure all values are visible and then print the new report. Your printed report should look like Figure 13.19.

**Figure 13.19**  
Completed Product  
by Buyer Report

Products by Buyer				
Buyer Name	Product Name	Quantity	Unit Cost	Total Cost
Fortier	Zoomer	5	\$1,800.00	\$9,000.00
	BW Hybrid	15	\$160.00	\$2,400.00
	Nalu	3	\$850.00	\$2,550.00
	Veneer Raven	2	\$750.00	\$1,500.00
Summary for 'BuyerName' = Fortier (4 detail records)				
			Sum	\$15,450.00
Lopez	Ripper	6	\$1,600.00	\$9,600.00
	Makani	12	\$150.00	\$1,800.00
	Sleeping One	4	\$1,150.00	\$4,600.00
Summary for 'BuyerName' = Lopez (3 detail records)				
			Sum	\$16,000.00
Ng	Ridley	3	\$1,350.00	\$4,050.00
	Badfish 2	2	\$550.00	\$1,100.00
	Badfish	5	\$450.00	\$2,250.00
	Candice Appleby	1	\$950.00	\$950.00
	Shubu X	3	\$550.00	\$1,650.00
Summary for 'BuyerName' = Ng (5 detail records)				
			Sum	\$10,000.00
Smith	Glide GS	8	\$850.00	\$6,800.00
	Nalu Air	4	\$650.00	\$2,600.00
Summary for 'BuyerName' = Smith (2 detail records)				
			Sum	\$9,400.00
			Grand Total	\$50,850.00

### Chapter 13 Case Problem 1: KELLY'S BOUTIQUE

*Note:* You must have completed Case 1 in the previous chapter in order to continue working on this case.

In the last chapter you added and modified some forms for Kelly's Boutique. She would now like you to create some new reports. Make the following changes for Kelly using the ch12-03\_student\_name file you created in Chapter 12. (*Note:* Open your ch12-03\_student\_name file and then save it as ch13-03\_student\_name before making the indicated changes.)

- a. Kelly would like you to modify an existing query (Ch 11 Kelly Case h) to include the publisher name and then to save the new query as Ch 11 Kelly Case o. Use this new query to generate a report listing all of the field names provided in the query and grouped by publisher, sorted by book title, with no summarizing, in a stepped layout with portrait orientation. Save the newly created report as Ch 13 Kelly Case a and then print the report, making sure that all fields of information are clearly readable before printing.
- b. Next, Kelly would like you to add some grouping to the report created in Case 1a. Rather than modify the existing report, create a new report using the Ch 11 Kelly Case o query to generate a report listing only the publisher, book title, quantity, and cost, grouped by publisher and sorted by book title, summing cost in a stepped layout with portrait orientation. Save the newly created report as Ch 13 Kelly Case b and then print the report, making sure that all fields of information are clearly readable before printing.
- c. Next, Kelly would like you to use the parameter query created previously (Ch 11 Kelly Case l) to create a report containing the fields book title and quantity for a specified publisher and viewed by Book Table, sorted by book title, with portrait orientation. Save the newly created report as Ch 13 Kelly Case c. Add a field to count the number of titles for the publisher specified and then sum the quantity of books for that publisher. Add line controls, change the report title, and move controls around so that your report looks like Figure 13.20.

## Books Published by Random House

Book Title	Quantity
Green Eggs and Ham	15
Hop on Pop	8
The Cat in the Hat	4
Number of Titles: 3	Quantity of books: 27

**Figure 13.20**

Report Example  
for Kelly Case C

Run the report for Random House and then print the report, making sure that all fields of information are clearly readable before printing.

### **Chapter 13 Case Problem 2:**

#### **WINE DEPOT**

*Note:* You must have completed Case 2 in the previous chapter in order to continue working on this case.

In the previous chapter you modified some forms for the Wine Depot. Now Barbara would like you to help her create some new reports. Make the following changes for Barbara using the ch12-04\_student\_name file you created in Chapter 12. (*Note:* Open your ch12-04\_student\_name file and then save it as ch13-04\_student\_name before making the indicated changes.)

- a. Use the Report Wizard to create and print a new report based on the query created in Chapter 11 (Ch 11 Wine Depot Case b), which listed all wine products purchased by Michael Jackson. Include all the fields available from the query, view the data by wine products with no grouping, sorted by type in ascending order, with portrait orientation. Title the report Ch 13 Wine Depot Case a and then print the report, making sure that all fields of information are clearly readable before printing.
- b. Use the Report Wizard to create and print a new report that lists the following fields: buyer name, type, winery name, vintage, and quantity. View your data by buyer and then by winery name, in ascending order by type, in stepped layout with portrait orientation. Title the report Ch 13 Wine Depot Case b and then print only page 1 of the report, making sure that all fields of information are clearly readable before printing.
- c. Create a new report of product total cost by winery. Using your previous query (Ch 11 Wine Depot Case k) as the basis for this report, include all the fields in that query and view them by winery. Sort the detail by type in ascending order, and add a summary option for total cost (in a Currency format) that shows detail and summary in a stepped layout with portrait orientation. Title the report Ch 13 Wine Depot Case c and then print only the last page of the report, making sure that all fields of information are clearly readable before printing.
- d. Modify your previous query (Ch 11 Wine Depot Case k) to be a parameter query by asking the user to specify a type of wine. Save the new query as Ch 11 Wine Depot Case m. Use that query to create a report of costs by type of wine. The report should include all the fields from the query except type. View the data by winery name, in ascending order by SKU, and in a stepped layout with portrait orientation. The report should calculate the sum of total cost for the wine selected. Run the report for Pinot Noir wines. Modify the report to look like Figure 13.21 by adding a line and a Grand Total in the report footer. Then title the report as Ch 13 Wine Depot Case d and print it, making sure that all fields of information are clearly readable before printing.



## Ch 12 Wine Depot Case d

Name	SKU	Cost	Quantity	Total Cost
<b>Babcock</b>				
	11475	\$17.50	48	\$840.00
<b>Melville</b>				
	11350	\$24.00	12	\$288.00
<b>Robert Mondovi</b>				
	12380	\$18.00	24	\$432.00
			Grand Total	\$1,560.00

**Figure 13.21**

Total Cost of Wines by Name

### Chapter 13 Case Problem 3:

#### SNICK'S BOARD SHOP

*Note:* You must have completed Case 3 in the previous chapter in order to continue working on this case.

In the previous chapter you modified some forms for Snick's Board Shop. Now Caitlin would like you to help her create some new reports. Make the following changes using the ch12-05\_student\_name file you created in Chapter 12. (*Note:* Open your ch12-04\_student\_name file and then save it as ch13-05\_student\_name before making the indicated changes.)

- Use the Report Wizard to create and print a new report based on the query created in Chapter 12 (Query B), which included all products in CategoryID 1. Include all the fields available from the query, view the data by products with no grouping, sorted by manufacturer name in ascending order, in a tabular layout with portrait orientation. Title the report Report A and then print the report, making sure that all fields of information are clearly readable before printing.
- Use the Report Wizard to create and print a new report that lists the following fields: ManufacturerName, CategoryName, ProductName, and Price. View your data by manufacturer and then by category, in ascending order by ProductName, in stepped layout with portrait orientation. Title the report Report B and then print only page 1 of the report, making sure that all fields of information are clearly readable before printing.
- Create a new parameter query that includes the CategoryName, ManufacturerName, ProductName, Quantity, and Price for a CategoryName specified when the query is run. Name this query Query L and then create a new report containing the ManufacturerName, ProductName, Quantity, and Price for a specified CategoryName and viewed by ManufacturerName, sorted by ProductName, with portrait orientation. Be sure to include a summary option which sums the quantity field in detail and summary. Save the newly created report as Report C. Run the report for CategoryName Complete and for CategoryName Longboards, and then print both reports.

- d. Create a new query that includes the CategoryName, ProductName, Quantity, Price, and Discount fields. Add a calculated field called DiscountedRetailValue to this query, which computes the quantity times the discounted price (Price x (1-Discount)) formatted as currency. Save the new query as Query M.
- e. Now create a report based on Query M that lists the CategoryName, ProductName, and DiscountedRetailValue grouped by CategoryName, sorted by ProductName with a sum of DiscountedRetailValue in the detail and summary portions of the report. Save the new report as Report D.

### **Chapter 13 Case Problem 4: ROSEY'S ROSES**

*Note:* You must have completed Case 4 in the previous chapter in order to continue working on this case. In the last chapter you created some forms for the Rosey's Roses. Now the company would like you to help it create some reports to extract information from the database. Make the following changes using the ch12-06\_student\_name file you created in Chapter 12. (Note: Open your ch12-06\_student\_name file and then save it as ch13-06\_student\_name before making the indicated changes.)

- a. Use the Report Wizard to create and print a new report based on Query D. Include all the fields available from the query, view the data by Grower with no grouping, sorted by product Description in ascending order, in a stepped layout with portrait orientation. Title the report Report A and then print the report, making sure that all fields of information are clearly readable before printing.
- b. Use the Report Wizard to create and print a new report that lists the following fields: Grower Name, Type, product Description, and Cost/Unit. View your data by Grower and then by Type, in ascending order by product Description, in stepped layout with portrait orientation. Title the report Report B and then print only page 1 of the report, making sure that all fields of information are clearly readable before printing.
- c. Create a new parameter query that includes the Type, Grower Name, product Description, Quantity, and Cost/Unit which asks "For which type?" when the query is run. Name this Query L and then create a new report containing the Grower Name, product Description, Quantity, and Cost/Unit for a specified Type and viewed by Grower Name, sorted by product Description, with a stepped layout and portrait orientation. Be sure to include a summary option which sums the Quantity field in detail and summary. Save the newly created report as Report C. Run the report for Type Shrub and for Type Tree, and then print both reports.
- d. Create a new query that includes the Quote Number, Customer Name, product Description, and Quantity Ordered fields. Add a calculated

field called Sales Price which is the Cost/Unit times (1 plus Markup) times (1 – Discount). Also include another calculated field called Total Quote which computes the Quantity Ordered times the Sales Price also formatted as currency and 2 decimal places. Save the new query as Query M and then print it. (Hint: be sure to include the Grower table in your query construction.)

- e. Now create a report based on Query M that lists all the fields available in that query in a tabular layout and landscape orientation. Save the report as Report D. Using the Design View; delete the two existing controls in the page footer. Now add two textbox controls. Add one which sums the Quantity Ordered (general number format) and one which sums the Quote Totals (currency format) in the report footer. Also add a Totals label, and resize all labels and fields so that your report looks like Figure 13.22.

Report D

Quote Number	Customer Name	Description	Quantity Ordered	Sales Price	Quote Total
100	Jan Muller	Koko Loko #7	10	\$38.98	\$389.80
101	Robert Frost	Don Juan Climber #5	20	\$73.17	\$1,463.37
102	Juliet Inch	Barbara Streisand 36in Tree	40	\$127.57	\$5,102.94
Totals			70		\$6,956.11

**Figure 13.22**  
Quotes

Save the modified report and print it.