Hands-On Exercises

Watch the Video for this Hands-On Exercise!

MyITLab® HOE1 Training

1 Form Basics

It is your first day on the job at La Vida Mocha. After talking with Ryung about her data-entry needs, you decide to create several sample forms with different formats. You will show each form to Ryung and Nabil to get feedback and see if they have a preference.

Skills covered: Create Forms Using Form Tools • Use Form Views • Work with a Form Layout Control • Sort Records in a Form

STEP 1 » CREATE FORMS USING FORM TOOLS

You will create some forms to help Ryung and Nabil with their data entry process. After discussing their needs, you created some sketches that you will implement. Refer to Figure 4.16 as you complete Step 1.

Step e: Title changed

Step c: Controls resized

Step b: Orders subform present

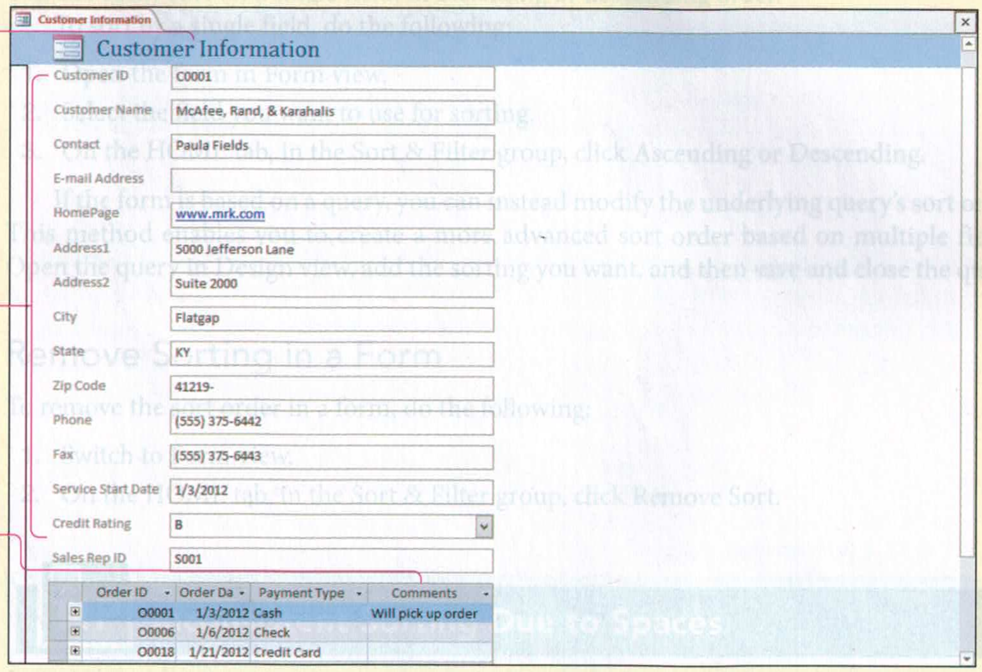

FIGURE 4.16 Customer Information Form After Step f

a. Open *a04h1Coffee*. Click the **FILE tab**, select **Save As**, and click **Save As**. Type **a04h1Coffee_LastFirst** as the file name. Click **Save**.

> **TROUBLESHOOTING:** Throughout the remainder of this chapter and textbook, click Enable Content whenever you are working with student files.

> **TROUBLESHOOTING:** If you make any major mistakes in this exercise, you can close the file, repeat step a above, and then start over.

b. Click the **Customers table** in the Navigation Pane. Click the **CREATE tab** and click **Form** in the Forms group.

Access creates a new form with two record sources—Customers (with stacked layout, on top) and Orders (with datasheet layout, below). Access found a one-to-many relationship between the Customers and Orders tables. The form opens in Layout view.

c. Click the top text box containing *C0001* if it is not already selected. The text box is outlined with a shaded border. Move the mouse to the right edge of the shaded border until the mouse pointer changes to a double-headed arrow. Drag the right edge to the left until the text box is approximately half of its original size.

All the text boxes and the subform at the bottom adjust in size when you adjust the top text box. This is a characteristic of Layout view—enabling you to easily modify all controls at once.

TROUBLESHOOTING: You may need to maximize the Access window or close the Navigation Pane if the right edge of the text box is not visible.

d. Ensure the labels at the left all appear without being cut off. If they are cut off, adjust the size of the labels like you did in step c.

e. Click **Save** in the Quick Access Toolbar, and then type **Customer Information** as the form name in the **Save As dialog box**. Click **OK**.

f. Click the **Customers title** at the top of the form to select it, click again, and then change the title to **Customer Information**. Press **Enter** to accept the change. Your form should now look like Figure 4.16. Close the form.

TROUBLESHOOTING: If you make a mistake that you cannot easily recover from, consider deleting the form and starting over. The Form tool makes it easy to start over again.

g. Verify the Customers table is selected in the Navigation Pane. Click the **CREATE tab** and click **More Forms** in the Forms group. Select **Split Form**.

Access creates a new form with a split view, one view in stacked layout and one view laid out like a datasheet.

h. Click anywhere on the Coulter Office Supplies customer record in the bottom portion of the form (record 14). Note: You may need to scroll down to see this record.

The top portion shows all the information for this customer.

i. Click the **Customers title** at the top of the form to select it, click **Customers** again, and then change the title to **Customers - Split View**. Press **Enter** to accept the change.

j. Click **Save** on the Quick Access Toolbar and type **Customers - Split View** in the **Form Name box**. Click **OK**. Close the form.

k. Click the **Products table** in the Navigation Pane. Click the **CREATE tab**, click **More Forms** in the Forms group, and then select **Multiple Items**.

Access creates a new multiple-item form based on the Products table. The form resembles a table's Datasheet view.

l. Click the **Products title** at the top of the form to select it, click again on **Products**, and then change the title to **Products - Multiple Items**. Press **Enter** to save the title.

m. Save the form as **Products - Multiple Items** and close the form.

n. Click the **Orders table** in the Navigation Pane. Click **Form** in the Forms group on the CREATE tab.

A form with a subform showing each line of the order is created.

o. Switch to Design view. Click anywhere inside the subform and press **Delete** on your keyboard.

The subform is removed.

p. Save the form as **Order Information**. Close all open objects.

STEP 2 » USE FORM VIEW TO CHANGE DATA

Now that you have created three forms, you will show Nabil how to use the forms to perform data entry.

a. Right-click the **Customer Information** form in the Navigation Pane and click **Open**. Advance to the sixth customer, *Lugo Computer Sales*, using the **Next Record button** on the Navigation Bar at the bottom of the form.

> **TROUBLESHOOTING:** Two Navigation bars exist, one for the main form and one for the subform. Make sure you use the bottom-most one that shows 14 records.

b. Double-click the **Customers table** in the Navigation Pane.

Two tabs now display in the main window. You will compare the table data and the form data while you make changes to both.

c. Verify the sixth record of the Customers table is *Lugo Computer Sales*, which corresponds to the sixth record in the Customer Information form. Click the tabs to switch between the table and the form.

d. Click the **Customer Information tab** and replace *Adam Sanchez*, the contact for Lugo Computer Sales, with your name. Advance to the next record to save the changes. Click the **Customers tab** to see that the contact name changed in the table as well.

The contact field and the other fields on the Customer Information form automatically change the data in the underlying table.

> **TROUBLESHOOTING:** If the change to Adam Sanchez does not display in the Customers table, check the Customer Information form to see if the pencil displays in the left margin. If it does, save the record by advancing to the next customer and recheck to see if the name has changed.

e. Close the Customer Information form and the Customers table.

f. Open the Customers – Split View form. In the bottom portion of the split form, click **Lugo Computer Sales**, the sixth record. Notice the top portion now displays the information for Lugo Computer Sales. Notice there is an error in the e-mail address—*service* is misspelled. In the top portion of the form, change the e-mail address to **service@lugocomputer.net**.

g. Click another record in the bottom pane and click back on **Lugo Computer Sales**.

The pencil disappears from the record selector box and the changes are saved to the table.

STEP 3 » USE LAYOUT VIEW TO MODIFY A FORM LAYOUT

You will make some changes to the layouts based on recommendations Nabil gave you after seeing the forms in action. You will also add a missing field to the main table and add it to the form. Refer to Figure 4.17 as you complete Step 3.

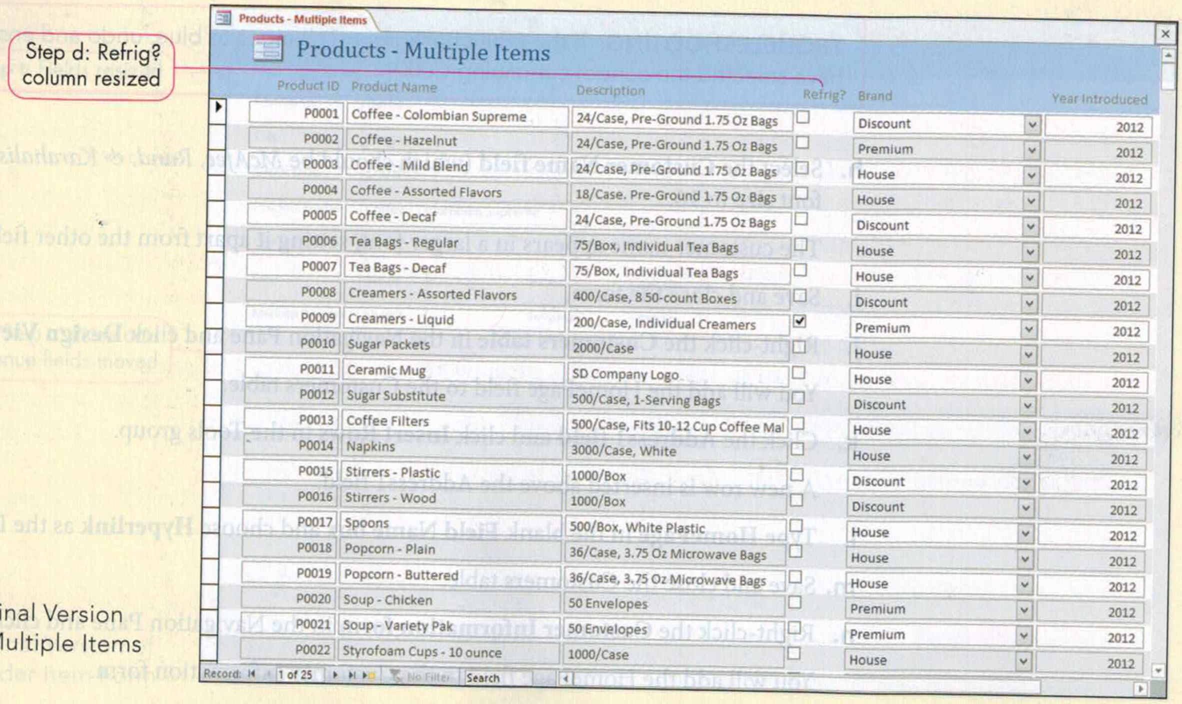

FIGURE 4.17 Final Version of Products—Multiple Items Report

a. Switch the Customers – Split View form to Layout view. Move your mouse over the splitter bar, the border between the top and bottom portions of the window. When the pointer shape changes to a double-headed arrow, drag the **splitter bar** up until it almost touches the Sales Rep ID field. Save and close the form.

b. Open the Products – Multiple Items form in Layout view. Move the mouse over the bottom edge of cell P0001 until the pointer shape changes to a two-headed arrow. Drag the bottom edge up to reduce the height of the rows so they are as tall as they need to be to accommodate the information.

   Changing the height of one row affects the height of all the rows.

c. Click anywhere on the Cost column and click **Select Column** in the Rows & Columns group on the ARRANGE tab. Press **Delete** to remove the column. Repeat the process to delete *MarkupPercent*.

d. Click the **Refrigeration Needed label** to select it. Change the label to the abbreviation **Refrig?**. Shrink the field so it is as wide as necessary. Save and close the form.

   You removed fields from the Products – Multiple Items form and the other fields adjust to maintain an even distribution (after you remove the blank space).

e. Open the Customer Information form in Layout view.

f. Click **Themes** in the Themes group on the DESIGN tab. Right-click the **Slice theme** and click **Apply Theme to This Object Only**.

   The font and color scheme adjust to match this theme.

TROUBLESHOOTING: Recall that you can determine which theme is named Slice by pointing the mouse to a theme and waiting for a tip to display. Themes are displayed in alphabetical order.

g. Click **Shape Fill** in the Control Formatting group on the FORMAT tab. Click **Light Turquoise, Background 2**.

   The background color of the CustomerID field changes to light turquoise.

TROUBLESHOOTING: If you do not see a Light Turquoise, Background 2 in the first row, ensure you have selected the Slice theme.

TROUBLESHOOTING: If the entire background changes to blue, undo and ensure you have selected the control containing *C0001*.

h. Select the **Customer Name field** (which should be *McAfee, Rand, & Karahalis*). Change the font size to **16**.

The customer name appears in a larger font, setting it apart from the other fields.

i. Save and close the form.

j. Right-click the **Customers table** in the Navigation Pane and click **Design View**.

You will add the HomePage field to the Customers table.

k. Click the **Address1 field** and click **Insert Rows** in the Tools group.

A new row is inserted above the Address1 field.

l. Type **HomePage** in the blank **Field Name box** and choose **Hyperlink** as the Data Type.

m. Save and close the Customers table.

n. Right-click the **Customer Information form** in the Navigation Pane and click **Layout View**.

You will add the HomePage field to the Customer Information form.

o. Click **Add Existing Fields** in the Tools group on the DESIGN tab to display the Field List pane (if necessary).

p. Click the **HomePage field.** Drag the field from the Field List pane to the form, below the E-mail Address field, until a shaded line displays between *E-mail Address* and *Address1*, and release the mouse. Close the Field List pane.

Access shows a shaded line to help you place the field in the correct location.

TROUBLESHOOTING: If the placement of this field does not look correct, you can use the Undo button and try again.

q. Switch to Form view. Press **Tab** until you reach the HomePage field and type www.mrk.com into the field. Save and close the form.

r. Click the **Revenue query** in the Navigation Pane. Click **Form** in the Forms group on the CREATE tab to create a new form based on this query.

s. Display the form in Design view. Select all text box field controls (from *Last Name* down to *Revenue*) by clicking on the first field (Last Name), holding down **CTRL** on your keyboard, and clicking on each of the other controls. Click **Remove Layout** in the Table group on the ARRANGE tab. Switch to Layout view.

TROUBLESHOOTING: Recall the Remove Layout option only appears in Design view, so if you do not see the option, ensure you are in Design view.

t. Resize the controls individually so they are approximately the same size as shown in Figure 4.18.

u. Click the **Price control**. Hold down **CTRL** and click the **Revenue control**, the **Price label**, and the **Revenue label**. Drag the fields to the locations shown in Figure 4.18. Switch to Form view.

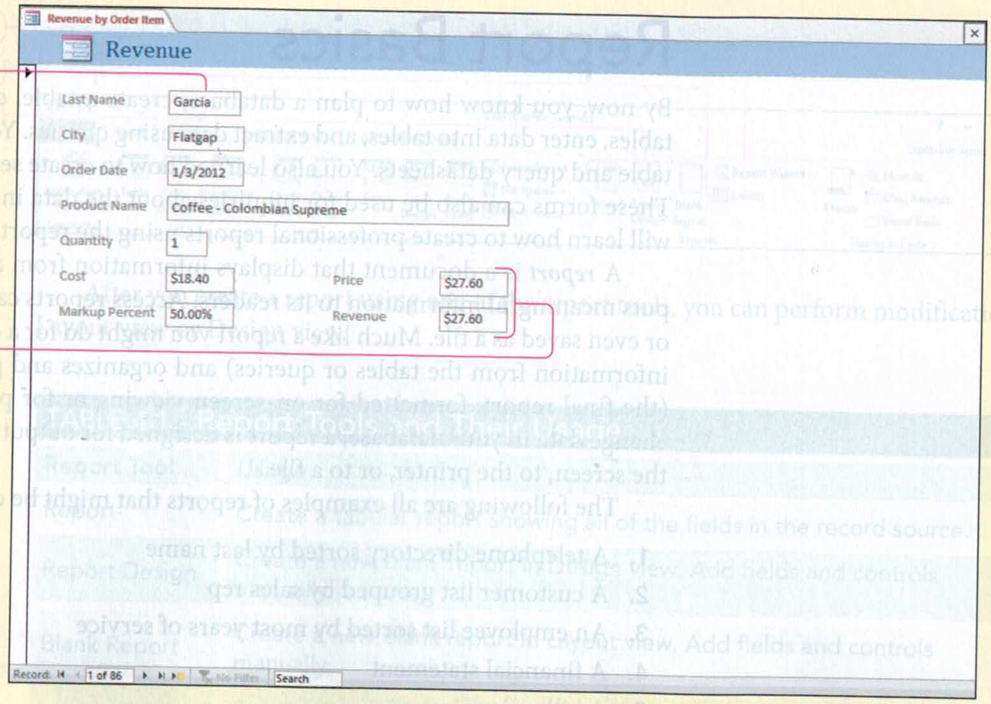

FIGURE 4.18 Final Version of Revenue by Order Item Form

v. Save the form as **Revenue by Order Item**. Close the form.

STEP 4 » USE A CONTROL LAYOUT AND SORT RECORDS IN A FORM

Ryung tested the Customer Information form and likes the way it is working. She asks you to change the sorting to make it easier to find customers with a similar customer name. She also has an old form that she hopes you can make easier to read but keep in the vertical format.

a. Open the Sales Reps form in Layout view. Notice the form is not laid out well.

b. Click **Select All** in the Selection group on the FORMAT tab.

   All 14 controls are outlined.

c. Click **Tabular** in the Table group on the ARRANGE tab.

   The controls are lined up horizontally.

d. Click **Stacked** in the Table group on the ARRANGE tab. Switch to Form view.

   Ryung wanted the form laid out vertically. The controls are lined up vertically and are much easier to read.

e. Save and close the form.

f. Open the Customer Information form in Form view. Click **Next record** in the Navigation bar at the bottom several times to advance through the records.

   Take note that the customers are in Customer ID order.

g. Click **First record** in the Navigation bar to return to customer *McAfee, Rand, & Karahalis*.

h. Click the **Customer Name field** and click **Ascending** in the Sort & Filter group on the HOME tab.

   Advantage Sales displays, as they are the first customer name in alphabetical order.

i. Click **Next record** in the Navigation bar at the bottom to advance through the records.

   The records are in Customer Name order.

j. Save and close the Customer Information form.

k. Keep the database open if you plan to continue with the next Hands-On Exercise. If not, close the database and exit Access.

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2 Report Basics

You create a Products report using the Access Report tool to help Ryung stay on top of the key data for her business. After Access creates the report, you modify the column widths so the entire report fits on one page (portrait or landscape, depending on the report). You also use the Report Wizard tool to create other reports for Ryung.

Skills covered: Create Reports Using Report Tools • Use Report Views • Modify a Report • Sort Records in a Report

STEP 1 » CREATING REPORTS USING REPORT TOOLS

You use the Report tool to create an Access report to help Ryung manage her product information. This report is especially useful for determining which products she needs to order to fill upcoming orders. Refer to Figure 4.40 as you complete Step 1.

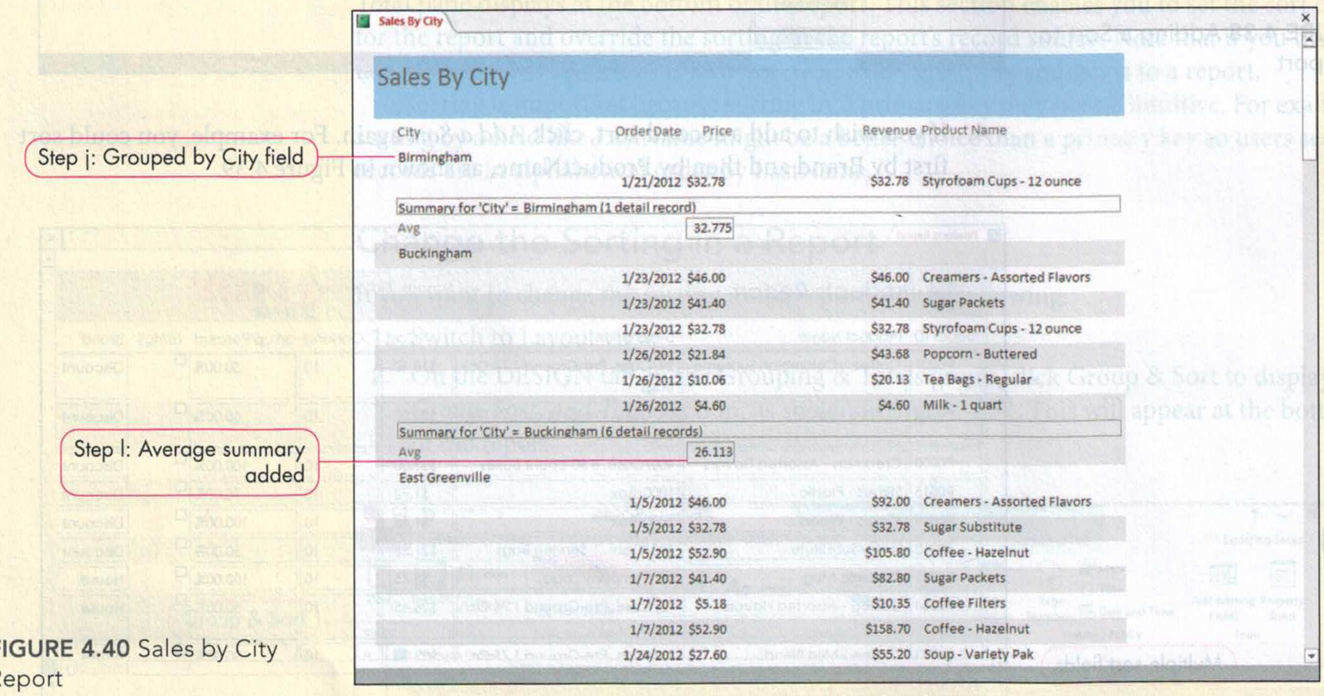


FIGURE 4.40 Sales by City Report

a. Open *a04h1Coffee_LastFirst* if you closed it at the end of Hands-On Exercise 1. Click the **FILE tab**, select **Save As**, and then click **Save As**. Type **a04h2Coffee_LastFirst** as the file name, changing *h1* to *h2*. Click **Save**.

b. Select the **Products table** in the Navigation Pane. Click the **CREATE tab** and click **Report** in the Reports group.

Access creates a new tabular layout report based on the Products table. The report opens in Layout view ready to edit.

c. Click the **Products title** at the top of the report to select it, click again on **Products**, and then change the title to **Products Report**. Press **Enter** to accept the change.

d. Right-click the **Products report tab** and select **Print Preview**.

The report is too wide for the page; you will exit Print Preview and change the orientation to Landscape.

e. Click **Close Print Preview**.

f. Click the **PAGE SETUP tab** and click **Landscape** in the Page Layout group.

The report changes to Landscape orientation. Most of the columns now fit onto one page. You will make further revisions to the report later on so that it fits on one page.

g. Save the report as **Products Report**. Close the report.

h. Select the **Revenue query** in the Navigation Pane. Click the **CREATE tab** and click **Report Wizard** in the Reports group.

The Report Wizard launches.

i. Click the **City field** and click the **> button** to add the City field to the report. Repeat the same process for the **OrderDate, Price, Revenue,** and **ProductName fields**. Click **Next**.

j. Select **City** and click the **> button** to add grouping by city. Click **Next**.

k. Select **OrderDate** for the sort order and leave the order as **Ascending**. Click **Summary Options**.

l. Click the **Avg check box** on the Price row to summarize the Price field. Click **OK**.

m. Click **Next**. Click **Next** again to accept the default layout.

n. Type **Sales by City** for the title of the report. Click **Finish**.

The report is displayed in Print Preview mode. Some of the data values and labels cannot be seen. Next, you will adjust the controls.

o. Click **Close Print Preview**.

p. Switch to Layout view if necessary and adjust the controls so all the field values are visible as shown in Figure 4.40.

q. Display the report in Print Preview to verify your changes.

r. Save and close the report.

STEP 2 » USING REPORT VIEWS

The Products report you created for La Vida Mocha looks very good, according to Ryung. However, she does not have Access at home and would like to have a copy of the report saved so she can bring it home. You will save a copy of the report for her.

a. Open the **Products Report** and switch to **Print Preview**. Click **PDF or XPS** in the Data group on the PRINT PREVIEW tab. Enter the file name **a04h2Products_LastFirst** and click **Publish**.

Windows will open the report in your system's default PDF viewer, which may be Adobe Reader or the Windows 8 Reader app.

b. Switch back to Access, if necessary. Click **Close** when asked if you want to save the export steps.

c. Click **Close Print Preview** and close the report.

STEP 3 » MODIFYING A REPORT

Ryung realized the Products table is missing a field. She would like you to add this to the table and update the report to reflect the new field. She would also like to make sure the report fits nicely onto one landscape page. She has also asked you to show her some sample color schemes.

a. Right-click the **Products table** and select **Design view**.

You need to add the OnHand field to the Products table.

b. Click the **MarkupPercent field** and click **Insert Rows** in the Tools group on the DESIGN tab.

A new blank row displays above the MarkupPercent field.

c. Type **OnHand** in the **Field Name box** and select **Number** as the Data Type.

d. Save the table. Click **View** to change to Datasheet view.

The new OnHand column appears empty in each row. Next, you will add sample data to the new field.

e. Fill in the number **10** for each item's OnHand field.

f. Close the Products table.

g. Right-click the **Products Report** and select **Layout view**.

h. Click **Add Existing Fields** in the Tools group on the DESIGN tab unless the Field List already appears on the right of your screen.

i. Drag the **OnHand field** from the Field List pane between the Cost and MarkupPercent fields. Close the Field List pane.

Because of the tabular layout control, Access adjusts all the columns to make room for the new OnHand field.

j. Display the report in Print Preview.

The report is still too wide for a single page.

k. Click **Close Print Preview**. Switch to Layout view if necessary.

l. Click anywhere on the **Year Introduced column**. Click the **ARRANGE tab** and click **Select Column** in the Rows & Columns group. Press **Delete** to remove the column.

The Year Introduced column is removed from the report and the other fields fill the empty space.

TROUBLESHOOTING: If you cannot see the Year Introduced column, try scrolling to the right.

m. Click the **ProductID column heading** and drag the right border to the left until the Product ID heading still fits, but any extra white space is removed.

n. Click the **Refrigeration Needed column heading** and rename the column **Refrig?**. Adjust the column width of the Refrig? column so any extra white space is removed.

o. Click **Themes** in the Themes group on the DESIGN tab.

The available predefined themes display.

p. Right-click the **Organic theme** and choose **Apply Theme to This Object Only**. Display the report in Print Preview.

Access reformats the report using the Organic theme.

TROUBLESHOOTING: If you cannot figure out which theme is which, you can hover the mouse over each theme and a ScreenTip will display the theme name.

q. Click **Close Print Preview**. Click the **FILE tab**, select **Save As**, select **Save Object As**, and then click **Save As**. Type **Products Organic** as the report name and click **OK**.

You saved the report with one theme. Now, you will apply a second theme to the report and save it with a different name.

r. Switch to Layout view and click **Themes** in the Themes group to apply a different theme.

s. Right-click the **Retrospect theme** and choose **Apply Theme to This Object Only**. Display the report in Print Preview.

If we do not tell Access to apply the theme to this object only, all objects will change.

t. Click **Close Print Preview**. Click the **FILE tab**, select **Save As**, select **Save Object As**, and then click **Save As**. Type **Products Retrospect** as the report name and click **OK**. Close the report.

You will be able to show Ryung two different themes.

STEP 4 » SORTING RECORDS IN A REPORT

Ryung would like the Products Report report to be sorted by Product Name order (rather than ProductID order). You change the sort order and preview again to see the results.

a. Open **Products Report** in Layout view.

TROUBLESHOOTING: If you cannot see the Products Report, click the Shutter Bar to maximize the Navigation Pane.

b. Click **Group & Sort** in the Grouping & Totals group on the DESIGN tab.

The *Add a group* and *Add a sort* options appear at the bottom of the report.

TROUBLESHOOTING: If the options do not appear, they may have been showing. Try clicking Group & Sort again.

c. Click **Add a sort.**

A new Sort bar displays at the bottom of the report.

d. Select **Brand** from the list.

The report is now sorted by Brand in Ascending order (with Discount on top).

e. Click **Add a group.**

f. Select **Brand** from the list.

The report is now grouped by Brand.

g. Display the report in Print Preview.

h. Close Print Preview and save and close the report.

i. Close the database. Submit the database and the PDF file *a04h2Products_LastFirst* based on your instructor's directions.

Practice Exercises

1 Financial Management

You are working as a customer service representative for a financial management firm. Your task is to contact a list of prospective customers and introduce yourself and the services of your company. You will create a form to help you view one customer at a time while also helping add and update the data. After creating the form, you will customize it and add sorting. You will also create a report to show you all the data on one screen, for viewing purposes. This exercise follows the same set of skills as used in Hands-On Exercises 1 and 2 in the chapter. Refer to Figure 4.41 as you complete this exercise.

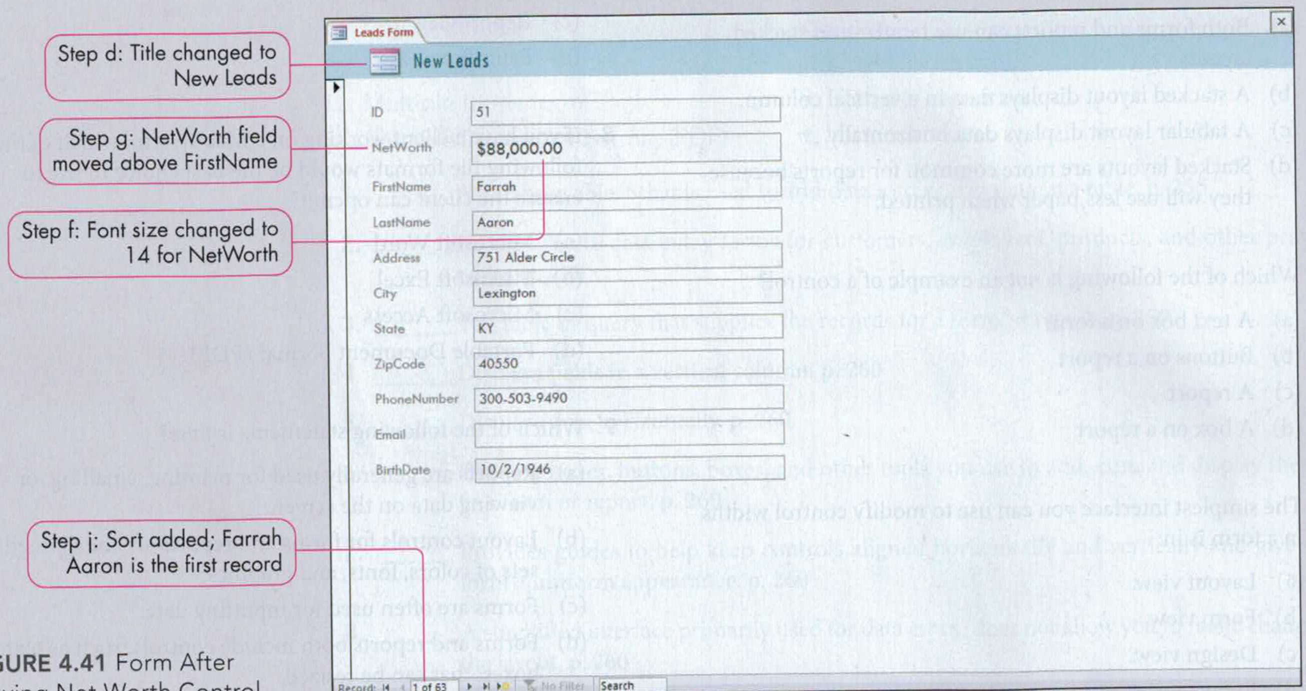


FIGURE 4.41 Form After Moving Net Worth Control

a. Start Access and open **a04p1Prospects**. Save the database as **a04p1Prospects_LastFirst**.
b. Click the **Leads table**. Click the **CREATE tab** and click **Form** in the Forms group.
   A new form based on the Leads table displays in Layout view.
c. Click the **ID text box** and drag the right border of the first field to the left to shrink the column by approximately half of its original size.
   The other columns will shrink as well.
d. Change the title of the form to **New Leads**.
e. Click **Themes** in the Themes group of the DESIGN tab. Select the **Integral theme** (first row, third column).
f. Change the font size to **14** for the NetWorth text box control.
g. Click **Select Row** in the Rows & Columns group on the ARRANGE tab. Click **Move Up** in the Move group on the ARRANGE tab until *NetWorth* appears above *First*.

TROUBLESHOOTING: If both items do not move together, undo, ensure both are selected, and then follow the instructions in step g.

   NetWorth should now appear above the FirstName. See Figure 4.41.
h. Save the form as **Leads Form**. Switch to Form view.

i. Navigate to record 63. Enter your first and last names in the appropriate fields. Leave the e-mail address blank.

j. Click in the **Last field** (if necessary) and click **Ascending** in the Sort & Filter group of the HOME tab. Farrah Aaron should be the first record displayed unless your last name appears before hers alphabetically.

k. Save and close the form.

l. Click the **Leads table**. Click **Report** in the Reports group on the CREATE tab.
A new report is created based on the Leads table.

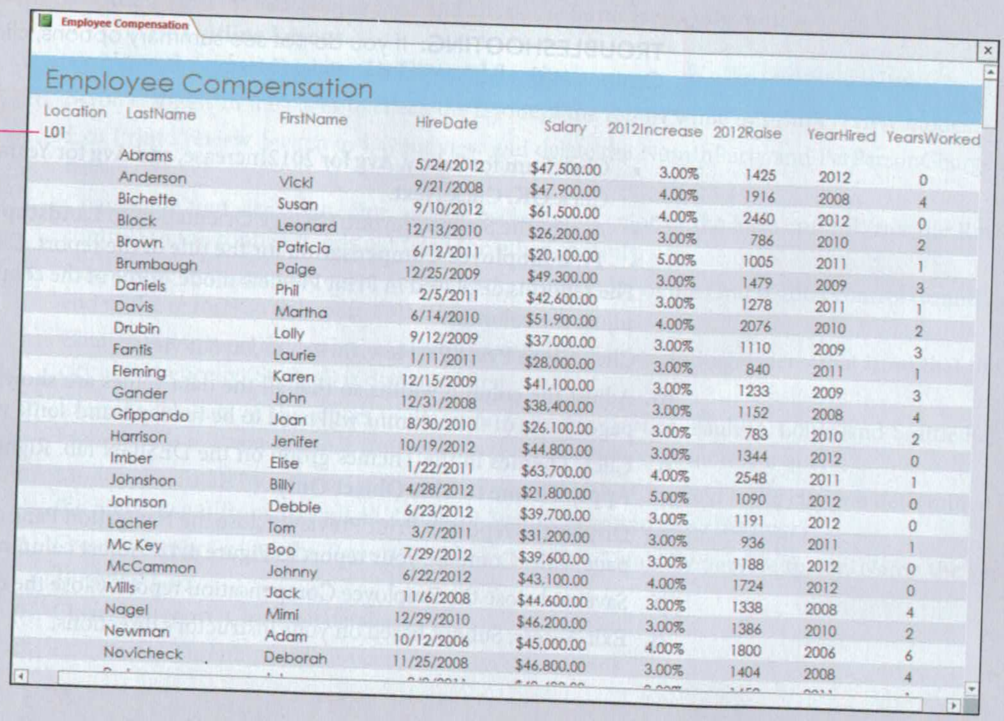
m. Make fields as small as possible to remove extra white space. Do not try to fit the entire report all on one page, as you will be using this for on-screen viewing only.

n. Save the report as **Leads Report**. Close the report.

o. Exit Access. Submit the database based on your instructor's directions.

2 Comfort Insurance

The Human Resources department of the Comfort Insurance Agency has initiated its annual employee performance reviews. You will create a form for them to help organize input and a report showing employee salary increases and bonuses. The employee data, along with forms and reports, are stored in an Access database. You need to prepare a report showing employee raises and bonuses by city. This exercise follows the same set of skills as used in Hands-On Exercises 1 and 2 in this chapter. Refer to Figure 4.42 as you complete this exercise.



Employee Compensation

Location	LastName	FirstName	HireDate	Salary	2012Increase	2012Raise	YearHired	YearsWorked
L01								
	Abrams		5/24/2012	$47,500.00	3.00%	1425	2012	0
	Anderson	Vicki	9/21/2008	$47,900.00	4.00%	1916	2008	4
	Bichette	Susan	9/10/2012	$61,500.00	4.00%	2460	2012	0
	Block	Leonard	12/13/2010	$26,200.00	3.00%	786	2010	2
	Brown	Patricia	6/12/2011	$20,100.00	5.00%	1005	2011	1
	Brumbaugh	Paige	12/25/2009	$49,300.00	3.00%	1479	2009	3
	Daniels	Phil	2/5/2011	$42,600.00	3.00%	1278	2011	1
	Davis	Martha	6/14/2010	$51,900.00	4.00%	2076	2010	2
	Drubin	Lolly	9/12/2009	$37,000.00	3.00%	1110	2009	3
	Fantis	Laurie	1/11/2011	$28,000.00	3.00%	840	2011	1
	Fleming	Karen	12/15/2009	$41,100.00	3.00%	1233	2009	3
	Gander	John	12/31/2008	$38,400.00	3.00%	1152	2008	4
	Grippando	Joan	8/30/2010	$26,100.00	3.00%	783	2010	2
	Harrison	Jenifer	10/19/2012	$44,800.00	3.00%	1344	2012	0
	Imber	Elise	1/22/2011	$63,700.00	4.00%	2548	2011	1
	Johnshon	Billy	4/28/2012	$21,800.00	5.00%	1090	2012	0
	Johnson	Debbie	6/23/2012	$39,700.00	3.00%	1191	2012	0
	Lacher	Tom	3/7/2011	$31,200.00	3.00%	936	2011	1
	Mc Key	Boo	7/29/2012	$39,600.00	3.00%	1188	2012	0
	McCammon	Johnny	6/22/2012	$43,100.00	4.00%	1724	2012	0
	Mills	Jack	11/6/2008	$44,600.00	3.00%	1338	2008	4
	Nagel	Mimi	12/29/2010	$46,200.00	3.00%	1386	2010	2
	Newman	Adam	10/12/2006	$45,000.00	4.00%	1800	2006	6
	Novicheck	Deborah	11/25/2008	$46,800.00	3.00%	1404	2008	4

FIGURE 4.42 Final Employee Compensation Report

a. Open *a04p2Insurance*. Save the database as **a04p2Insurance_LastFirst**.

b. Select the **Locations table**. Click the **CREATE tab** and click **Form** in the Forms group.
A new form based on the Locations table opens in Layout view.

c. Click the **LocationID text box** containing *L01*. Move the mouse to the right edge of the shaded border until the mouse pointer changes to a double-headed arrow. Drag the right edge to the left to reduce the size of the text box to approximately half of its original size.

The LocationID field and all the other fields should become smaller.

d. Click the subform at the bottom of the form. Press **Delete** to delete the subform.

e. Click **Themes** in the Themes group on the DESIGN tab. Right-click the **Wisp theme** (third row, first column) and select **Apply Theme to This Object Only**.

f. Save the form as **Locations**. Close the form.

g. Select the **Locations table**. Click the **CREATE tab** and click **Report** in the Reports group.

A new tabular layout report based on the Locations table opens in Layout view.

h. Click the **LocationID label** and drag the right border of the label to the left to reduce the size of the control to approximately half of its original size.

i. Repeat the sizing process with the **Zipcode label** and the **OfficePhone label**. Adjust the other columns if necessary until there are no controls on the right side of the vertical dashed line.

j. Display the report in Print Preview. Verify that the report is only one page wide. Save the report as **Locations** and close the report.

k. Select the **Employees Query**. Click the **CREATE tab** and click **Report Wizard** in the Reports group to launch the Report Wizard. Respond to the questions as follows:

- Click (>>) to add all the fields to the Selected Fields box. Click **Next**.
- Accept grouping by Location. Click **Next**.
- Select **LastName** for the first sort order and **FirstName** for the second. Click **Summary Options**.

TROUBLESHOOTING: If you do not see summary options, click Back and click Summary Options at the bottom of the dialog box.

- Click **Sum** for Salary, **Avg** for 2012Increase, and **Avg** for YearsWorked. Accept all other defaults. Click **OK**. Click **Next**.
- Accept the Stepped layout. Change Orientation to **Landscape**. Click **Next**.
- Type **Employee Compensation** for the title of the report. Click **Finish**.

The report is displayed in Print Preview mode. Some of the columns are too narrow. Next, you will adjust the columns.

l. Click **Close Print Preview**. Switch to Layout view.

m. Adjust the column widths so that all the data values are showing and the report appears on one page. Some of the columns will need to be reduced, and some will need to be widened.

n. Click **Themes** in the Themes group on the DESIGN tab. Right-click the **Slice theme** and choose **Apply Theme to This Object Only**.

o. Display the report in Print Preview. Close the Navigation Pane and verify that the report is still one page wide. Compare your report to Figure 4.42. Adjust column widths to display all values.

p. Save and close the Employee Compensation report. Close the database.

q. Exit Access. Submit based on your instructor's directions.

Mid-Level Exercises

1 Hotel Chain

ANALYSIS CASE

You are the general manager of a large hotel chain. You track revenue by categories, such as conference room rentals and weddings. You need to create a report that shows which locations are earning the most revenue in each category. You will also create a report to show you details of your three newest areas: St. Paul, St. Louis, and Seattle.

a. Open *a04m1Rewards*. Save the database as **a04m1Rewards_LastFirst**.

b. Select the **Members table** and create a Multiple Items form. Save the form as **Maintain Members**.

c. Modify the form in Layout view as follows:
   - Change the MemNumber label to **MemID** and reduce the MemNumber column width.
   - Adjust the column widths to eliminate extra white space.
   - Delete the form icon (the picture next to the title of the form) in the Form Header.

d. Change the sorting on the MemberSince control so that the members who joined most recently are displayed first.

DISCOVER

e. Click on the **LastName field**. Change the Control Padding to **Wide**. Hint: Search **Control Padding Wide** in Access Help.

   The controls have some extra space between them.

f. Save and close the form.

g. Select the **Revenue query** and create a report using the Report Wizard. Answer the wizard prompts as follows:
   - Include all fields.
   - Add grouping by City and by ServiceName.
   - Add a Sum to the Revenue field and check the **Summary Only option**.
   - Choose **Outline Layout**.
   - Name the report **Revenue by City and Service**.

h. Scroll through all the pages to check the layout of the report while in Print Preview mode.

i. Exit Print Preview. Switch to Layout view and delete the NumInParty and PerPersonCharge controls.

j. Change the font size, font color, and/or background color of the Sum control (not the Revenue control) so the control stands out from the other controls.

k. Change the font size, font color, and/or background color of the Grand Total control (found at the end of the report) so the control stands out as well.

l. Change the sort on the report, so that it sorts by city in descending order—that is, so that the last city alphabetically (St. Paul) is displayed first.

★ m. Examine the data in the report to determine which city of St. Paul, St. Louis, and Seattle has the highest Sum of event revenue. You will use this information to modify a query.

★ n. Modify the Totals by Service query so the criteria for the City field is the city you determined had the highest sum from St. Paul, St. Louis, or Seattle. Save and close the query.

o. Create a report using the Report tool based on the Totals by Service query. Name the report **Targeted City**.

p. Close the report. Close the database.

q. Exit Access. Submit based on your instructor's directions.

2 Benefit Auction

FROM SCRATCH

You are helping to organize a benefit auction to raise money for families who lost their homes in a natural disaster. The information for the auction is currently stored in an Excel spreadsheet, but you have volunteered to migrate this to Access. You will create a database that will store the data from Excel in an Access database. You will create a form to manage the data-entry process. You also need to create two reports: one that lists the items collected in each category and one for labels so you can send the donors a thank-you letter after the auction.

a. Open Access and create a new database named **a04m2Auction_LastFirst**. A new table appears with an ID column.

b. Switch to Design view. Type **Items** in the **Save As dialog box** and click **OK**.

c. Change the ID Field Name to **ItemID**. Type **Description** in the second row and press **Tab**. Accept **Short Text** as the Data Type. Type **50** in the **Field Size property** in Field Properties.

d. Type the remainder of the fields and adjust the data types as shown:

Field Name	Data Type
DateOfDonation	Date/Time
Category	Short Text
Price	Currency
DonorName	Short Text
DonorAddress1	Short Text
DonorAddress2	Short Text

e. Open Excel. Open the **a04m2_Items** file. Examine the length of the Category, DonorName, DonorAddress1, and DonorAddress2 columns. Determine how many characters are needed for each field, and round to the nearest 5. For example, if a field needs 23 characters, you would round up to 25. You will use this to change field sizes in the table.

f. Change the field size for the Category, DonorName, DonorAddress1, and DonorAddress2 to the sizes you chose in step e. Save the table.

g. Copy and paste the rows from the Excel file into the table. Resize the columns so all data is visible. Close the table.

TROUBLESHOOTING: Recall that you must click the Record Selector (pencil icon, to the left of a blank row) to paste data.

TROUBLESHOOTING: Once you have pasted the data, ensure your chosen field sizes did not cause you to lose data. If so, update the field size, delete the records you pasted in, and then repeat step g.

h. Verify that the Items table is selected. Create a new form using the Form tool.

i. Change the layout of the form to a **Tabular Layout**. Resize field widths to reduce extra space. It is acceptable for field values to appear on two lines.

j. Change the title of the form to **Items for Auction**.

DISCOVER

k. Add conditional formatting so that each Price that is greater than 90 has a text color of **Green**. Use the Green color in the first row of the options.

l. Save the form as **Auction Items Form**.

m. Switch to Form view. Create a new record with the following information. Note it will automatically assign an ItemID of 27 for you.

Description	DateOfDonation	Category	Price	DonorName	DonorAddress1	DonorAddress2
iPad	12/31/2016	House	$400	Staples	500 Market St	Brick, NJ 08723

n. Add a sort to the form, so the lowest priced items appear first. Close the form.

o. Select the **Items table** in the Navigation Pane and create a report using the Report Wizard. Include all fields except the donor address fields, group by Category, include the Sum of Price as a Summary Option, accept the default layout, and then save the report **Auction Items by Category**.

p. Switch to Layout view and adjust the controls so all data is visible. Preview the report to verify the column widths are correct.

q. Sort the report so the least expensive items are shown first. Save and close the report.

r. Create mailing labels based on the Avery 5660 template. Place the donor name on the first line, address on the second, and city, state, and ZIP on the third line. Sort the labels by DonorName. Name the report **Donor Labels**. After you create the labels, display them in Print Preview mode verify everything will fit onto the label template. Close the label report.

s. Exit Access. Submit the database based on your instructor's directions.

3 Used Cell Phones for Sale

COLLABORATION CASE

You and a few of your classmates started a new business selling used cell phones, MP3 players, and accessories. You have been using an Access database to track your inventory. You need to create several forms and reports to increase database efficiency and analysis. You have used Access forms and reports as part of your classwork, but you would like to experiment with them as they apply to you in a real-world scenario.

a. Choose one unique type of form and one unique type of report each. Based on your experience in class, you saw there were a number of different types of forms and reports that can be created. Choose one each from the following:

   Forms: Form tool, Form Wizard, Multiple Items Form, Split Form

   Reports: Report Tool, Report Wizard, Label Wizard

b. Open Access and open the *a04t1Phones* database individually. Save the file as **a04t1Phones_LastFirst**. Each of you will create your forms and reports in an individual database.

c. Create a form and a report based on the Inventory table, using the type of form and report you chose in step a, unless you chose Label Wizard. If you chose Label Wizard, you should create a report based on the Mailing List table, using Avery 8660 as your destination label.

d. Save the form and report as **LastFirst**, replacing Last and First with your last and first names.

e. Make the report as attractive and useful as possible. You may want to change sorting, add grouping (to reports), remove or add a layout control, change formatting options, and/or change the background color. Modify the form and report, save the changes, and exit Access.

f. Meet as a group. Open the *a04t1Phones* database and save the file as **a04t1Phones_GroupName**.

g. Import the form and report from each of your databases.

   Your *a04t1Phones_GroupName* file will now have one form and one report for each student.

h. Examine the forms and reports each of you created.

i. Examine your results. Determine which forms and reports you would keep, if this were the real world. Rename the forms and reports you would keep as **Keep_LastFirst** and rename the ones you would discard as **Discard_LastFirst**. Do not delete the forms and reports you will not use.

j. Modify the forms and reports you plan to keep as a group, if necessary. Save the changes and close all forms and reports. Ensure each student has a copy of the final *a04t1Phones_GroupName* database.

k. Exit Access and submit both the *a04t1Phones_GroupName* and *a04t1Phones_LastFirst* databases based on your instructor's directions.