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Microsoft

Chapter at a Glance



3 Create Simple Forms

In this chapter, you will learn how to

- Create forms by using the Form tool.
- Change the look of forms.
- Change the arrangement of forms.

A database that contains the day-to-day records of an active company is useful only if it is kept current and if the information stored in it can be found quickly. Although Microsoft Access 2010 is fairly easy to use, entering, editing, and retrieving information in Datasheet view is not a task you would want to assign to someone who's not familiar with Access. Not only would these tasks be tedious and inefficient, but working in Datasheet view leaves far too much room for error, especially if details of complex transactions have to be entered into several related tables. The solution to this problem is to create and use forms.

A form is an organized and formatted view of some or all of the fields from one or more tables. Forms work interactively with the tables in a database. You use controls in the form to enter new information, to edit or remove existing information, or to locate information. The controls you will use most frequently in an Access form are:

- **Text box controls** You can view or enter information in these controls. Think of a text box control as a little window through which you can insert data into the corresponding field of the related table or view information that is already in that field.
- Label controls These tell you the type of information you are looking at in the corresponding text box control, or what you are expected to enter in the text box control.

Tip An Access form can also include a variety of other controls, such as list boxes, that transform the form into something very much like a Windows dialog box or wizard page. For information, see "Restricting Data to Values in Lists" in Chapter 6, "Maintain Data Integrity."

In this chapter, you'll discover how easy it is to create forms to view and enter information. You'll also modify forms to suit your needs by changing their appearance and the arrangement of their controls.

Practice Files Before you can complete the exercises in this chapter, you need to copy the book's practice files to your computer. The practice files you'll use to complete the exercises in this chapter are in the Chapter03 practice file folder. A complete list of practice files is provided in "Using the Practice Files" at the beginning of this book.

Creating Forms by Using the Form Tool

Before you begin creating a form, you need to know the following:

- Which table the form should be based on
- How the form will be used

After making these decisions, you can create a form in the following ways:

- By clicking the table you want in the Navigation bar, and then clicking the Form button in the Forms group on the Create tab. This method creates a simple form that uses all the fields in the table.
- By using a wizard. This method enables you to choose which of the table's fields you want to use in the form.

See Also For information about using wizards to create forms, see "Modifying Forms Created by Using a Wizard" in Chapter 7, "Create Custom Forms."

 Manually in Layout view where you can see the underlying data or Design view where you have more control over form elements.

See Also For information about manipulating forms in Layout view, see the other two topics in this chapter. For information about manually creating forms in Design view, see "Adding Controls" in Chapter 7, "Create Custom Forms."

Tip When creating forms for a Web database, you must use Layout view. You can use Layout view or Design view for non-Web databases.

You will usually want to start the process of creating forms that are based on tables by using the Form tool or a wizard—not because the manual process is especially difficult, but because it is simply more efficient to have the tool or a wizard create the basic form for you and then refine that form manually.

In this exercise, you'll use the Form tool to create a form based on a table. You will then enter a couple of records by using the new form and refresh the table to reflect the new entries. **SET UP** You need the GardenCompany03_start database located in your Chapter03 practice file folder to complete this exercise. Open the GardenCompany03_start database, and save it as *GardenCompany03*. Then follow the steps.

Important The practice file for this exercise contains tables that look similar to those in the practice file for Chapter 1. However, to simplify the steps, we have removed the relationships between the tables. Be sure to use the practice database for each chapter rather than continuing on with the database from an earlier chapter.

1. In the **Navigation** pane, display **All Access Objects**, and then in the **Tables** group, double-click **Customers**.

CustomerID -	FirstName 🔻	LastName 👻	Address 👻	City 🚽	Region -	F
ACKPI	Pilar	Ackerman	8808 Backbay S	Bellevue	WA	8
ADATE	Terry	Adams	1932 52nd Ave.	Vancouver	BC	٧
ALLMI	Michael	Allen	130 17th St.	Vancouver	BC	٧
BANMA	Martin	Bankov	78 Riverside Dr	Woodinville	WA	8
BENPA	Paula	Bento	6778 Cypress P	Oak Harbor	WA	8
BERKA	Karen	Berg	PO Box 69	Yakima	WA	8
BOSRA	Randall	Boseman	55 Grizzly Peak	Butte	MT	4
BRETE	Ted	Bremer	311 87th Pl.	Beaverton	OR	8
BROKE	Kevin F.	Browne	666 Fords Land	Seattle	WA	8
CAMDA	David	Campbell	22 Market St.	San Francisco	CA	8
CANCH	Chris	Cannon	89 W. Hilltop D	Palo Alto	CA	8
CHANE	Neil	Charney	1842 10th Aven	Sidney	BC	ν
CLAMO	Molly	Clark	785 Beale St.	Sidney	BC	ν
COLPA	Pat	Coleman	876 Western Av	Seattle	WA	8
CORCE	Cecilia	Cornejo	778 Ancient Rd	Bellevue	WA	8
COXBR	Brian	Cox	14 S. Elm Dr.	Moscow	ID	7
CULSC	Scott	Culp	14 E. University	Seattle	WA	8

The Customers table opens in Datasheet view.

The record navigation bar shows that there are 108 records in this table.

Notice the CustomerID field, which contains a unique identifier for each customer and is the primary key field. In this case, the unique identifier is not an auto-generated number, but the first three letters of the customer's last name combined with the first two letters of his or her first name.

See Also For more information about this type of primary key, see "Restricting Data to Values in Other Tables" in Chapter 6, "Maintain Data Integrity."

2. On the **Create** tab, in the **Forms** group, click the **Form** button.



Access creates a simple form based on the active table and displays the form in Layout view. In this view, you can make adjustments to the layout and content of the form by clicking the buttons on three Form Layout Tools contextual tabs.

Tip You don't have to open a table to create a form based on it. You can simply click the table in the Navigation pane to select it and then click the Form button in the Forms group on the Create tab. But it is sometimes useful to have the table open behind the form so that you can verify the form contents against the table contents.

🗛 🛃 🔊 - (≌ - - Garde	nCompany03 : Database	(Access 20 Form Layout Tools 🛛 🗖 Β	3
File Home Create	External Data Dat	tabase Tools Design Arrange Format 🛆	8
Views Themes	abl Aa 🚥	Controls	
-	Customers E Cust		×
Tables Categories	E Custo		
Customers Employees	tustomerID	ACKPI	
Order Details	FirstName	Pilar	7
Orders			
Products	LastName	Ackerman	-
Shippers	Address	8808 Backbay St.	
Suppliers			-
	City	Bellevue	
	Region	WA	
	PostalCode	88004	
	Country	USA	
	PhoneNumber	(425) 555-0194	
R	ecord: I4 → 1 of 108 →	No Filter Search III	▶
Layout View		Num Lock 🖬 🗷 🖌	

The first record in the table, displayed in Layout view.

Troubleshooting The appearance of buttons and groups on the ribbon changes depending on the width of the program window. For information about changing the appearance of the ribbon to match our screen images, see "Modifying the Display of the Ribbon" at the beginning of this book.

The Form tool has configured all the field names in the table as labels and all the fields as text boxes. In the header at the top of the form, the name of the table appears as a title, and the form icon appears as a placeholder for a logo.

3. Move the mouse pointer over the form, and click any label or text box control.

In Layout view, you can adjust the controls on the form, so any control you click becomes selected, ready for manipulation.

4. On the **View Shortcuts** toolbar, click the **Form View** button. Then move the mouse pointer over the form, and click the **City** label.

In Form view, the Form Layout Tools contextual tabs are no longer displayed. Clicking a label doesn't select the label for manipulation; instead it selects the entry in the adjacent text box, ready for editing.

	Customers 🔳 Cust	omers ×
	== Custo	mers
	CustomerID	ACKPI
	FirstName	Pilar
	LastName	Ackerman
	Address	8808 Backbay St.
	City	Bellevue
	Region	WA
	PostalCode	88004
	Country	USA
	PhoneNumber	(425) 555-0194
Re	cord: ₩ → 1 of 108 →	H M No Filter Search

The first record, displayed in Form view.

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5. In the record navigation bar at the bottom of the form, click the **Next Record** button.

Access displays the second record in the table.

6. Use the record navigation bar to display a few more records.

Tip You can easily compare the information shown in the form to that in the table by alternately clicking the Customers table tab and the Customers form tab to switch back and forth between their pages.

7. At the right end of the record navigation bar, click the **New (Blank) Record** button.

Access displays a blank Customers form, ready for you to enter information for a new customer.

Customers 🖽 Cus	tomers			×
E Custo	omers			
CustomerID FirstName LastName				
Address				
City				
Region				
PostalCode				
Country				
PhoneNumber				
Record: M 4 109 of 109	🔸 🕨 📧 🐺 No Filter	Search	•	

The record navigation bar shows that this will be record number 109.

8. Click the **CustomerID** label.

The text box to the right now contains the cursor.

9. Type **ASHCH**, and press Tab.

When you start typing, the icon that indicates a record is receiving data (two dots and a pencil) appears in the bar to the left. When you press Tab or Enter, the cursor moves to the next text box.

10. Type the following information, pressing the Tab key to move to the next text box.

FirstName	Chris
LastName	Ashton
Address	89 Cedar Way
City	Redmond
Region	WA
PostalCode	88052
Country	USA
PhoneNumber	(425) 555-0191

11. When you finish entering the phone number, press Enter.

Because you just typed the last field value in the record, Access displays another blank record. The record navigation bar now shows that this will be the 110th record in the table.

12. Type the following information, pressing the Tab key to move from text box to text box.

CustomerID	BERJO
FirstName	Jo
LastName	Berry
Address	407 Sunny Way
City	Kirkland
Region	WA
PostalCode	88053
Country	USA
PhoneNumber	(425) 555-0187

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13. When you finish entering the phone number, press Enter. Then in the record navigation bar, click the **Previous Record** button.

Access cancels the new record and displays the record you just created.

🖽 Customers 🔳 Cust	tomers	×
E Custo	mers	
CustomerID	BERJO	
FirstName	ol	
LastName	Berry	
Address	407 Sunny Way	
City	Kirkland	
Region	WA	
PostalCode	88053	
Country	USA	
PhoneNumber	(425) 555-0187	
Record: M 4 110 of 110	▶ ₩ ₩ Ko Filter Search	

The information you entered for record number 110.



14. Click the **Customers** table tab, and on the record navigation bar, click the **Last Record** button.

The two records you entered in the form do not appear at the bottom of the table, and the record navigator bar indicates that there are only 108 records in the table.



15. On the Home tab, in the Records group, click the Refresh All button.

Access synchronizes the form data input with the table, updates the record navigator bar to show 110 records, and displays the top of the table.

CustomerID -	FirstName -	LastName -	Address -	City -	Region	+ P
АСКРІ	Pilar	Ackerman	8808 Backbay S	Bellevue	WA	8
ADATE	Terry	Adams	1932 52nd Ave.	Vancouver	BC	V
ALLMI	Michael	Allen	130 17th St.	Vancouver	BC	ν
ASHCH	Chris	Ashton	89 Cedar Way	Redmond	WA	8
BANMA	Martin	Bankov	78 Riverside Dr	Woodinville	WA	8
BENPA	Paula	Bento	6778 Cypress P	Oak Harbor	WA	8
BERJO	Jo	Berry	407 Sunny Way	Kirkland	WA	8
BERKA	Karen	Berg	PO Box 69	Yakima	WA	8
BOSRA	Randall	Boseman	55 Grizzly Peak	Butte	MT	4
BRETE	Ted	Bremer	311 87th Pl.	Beaverton	OR	8
BROKE	Kevin F.	Browne	666 Fords Land	Seattle	WA	8
CAMDA	David	Campbell	22 Market St.	San Francisco	CA	8
CANCH	Chris	Cannon	89 W. Hilltop D	Palo Alto	CA	8
CHANE	Neil	Charney	1842 10th Aven	Sidney	BC	V
CLAMO	Molly	Clark	785 Beale St.	Sidney	BC	V
COLPA	Pat	Coleman	876 Western Av	Seattle	WA	8
CORCE	Cecilia	Cornejo	778 Ancient Rd	Bellevue	WA	8
COXBR	Brian	Cox	14 S. Elm Dr.	Moscow	ID	7
CULSC	Scott	Culp	14 E. University	Seattle	WA	8

The two new records now appear in alphabetical order based on their CustomerID field values.

16. Close the **Customers** table.

17. On the Quick Access Toolbar, click the **Save** button. Then in the **Save As** dialog box, click **OK** to accept *Customers* as the form name.

Access saves the form. The Forms group appears on the Navigation bar, listing Customers as the only form in the database.



CLEAN UP Close the form. Retain the GardenCompany03 database for use in later exercises.

Changing the Look of Forms

When you create a form by using the Form tool, as you did in the previous exercise, the form includes every field in the table on which it is based. Each field is represented on the form by a text box control and its associated label control. The form is linked, or *bound*, to the table, and each text box is bound to its corresponding field. The table is called the *record source*, and the field is called the *control source*.

Forms and their controls have properties that determine how they behave and look. A form inherits some of its properties from the table on which it is based. For example, each text box name on the form reflects the corresponding field name in the source table. The text box label also reflects the field name, unless the field has been assigned a Caption property, in which case it reflects the caption. The width of each text box is determined by the Field Size property in the table.

Even though a form is bound to its table, the properties of the form are not bound to the table's properties. After you have created the form, you can change the properties of the form's fields independently of those in the table. You might want to change these properties to improve the form's appearance—for example, you can change the font, font size, alignment, fill color, and border.

One of the quickest ways to change the look of a form is to change the theme applied to the database. A theme is a combination of colors and fonts that controls the look of certain objects. In the case of a form, it controls the color and text of the header at the top of the form and the text of the labels and text boxes. By default, the Office theme is applied to all databases based on the Blank Database template and their objects, but you can easily change the theme by clicking the Themes button in the Themes group on the Design contextual tab, and then making a selection from the Themes gallery. While the gallery is displayed, you can point to a theme to display a live preview of how the active database object will look with that theme's colors and fonts applied.

If you like the colors of one theme and the fonts of another, you can mix and match theme elements. First apply the theme that most closely resembles the look you want, and then in the Themes group, change the colors by clicking the Colors button or the fonts by clicking the Fonts button.

Tip If you create a combination of colors and fonts that you would like to be able to use with other databases, you can save the combination as a new theme by clicking Save Current Theme at the bottom of the Themes gallery.

If you like most of the formatting of a theme but you want to fine-tune some elements, you can do so in Layout view. In this view, you can see the records from the table to which the form is bound, so when you make adjustments, you can see the impact on the data. (Changes to the data can be made only in Form view.) You might also want to add your organization's logo or a small graphic that represents the form's contents.

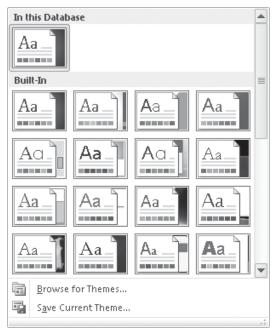
In this exercise, you'll change the form properties that control its colors and text attributes. You'll also add a logo to the form.

SET UP You need the GardenCompany03 database you worked with in the preceding exercise and the Logo graphic located in your Chapter03 practice file folder to complete this exercise. Open the GardenCompany03 database, and then follow the steps.

1. In the **Navigation** pane, under **Forms**, right-click **Customers**, and then click **Layout View**.

The Customers form opens in Layout view.

 On the **Design** contextual tab, in the **Themes** group, click the **Themes** button. The Themes gallery appears.



Each thumbnail represents a theme. By default, the Office theme is applied to this database.

3. Point to each thumbnail in turn, pausing to see its name in the ScreenTip that appears and the live preview of the form header and text.

💫 Themes 🔻

- 4. Click the **Austin** thumbnail to apply that theme.
- 5. On the **Design** tab, in the **Header/Footer** group, click the **Logo** button.
- With the contents of your Chapter03 practice file folder displayed in the Insert Picture dialog box, double-click the Logo picture.

The logo replaces the form icon to the left of the title in the form header.

	Customers	×	<
	🗄 🔟 Cus	stomers	
	CustomerID	ACKPI	
	FirstName	Pilar	_
	LastName	Ackerman	_
	Address	8808 Backbay St.	
	City	Bellevue	_
	Region	WA	
	PostalCode	88004	_
	Country	USA	_
	PhoneNumb€	(425) 555-0194	
Reco	ord: 🖂 🕂 1 of 110 🔶	N No Filter Search	Þ

The form now has a custom logo.

Now let's experiment with individual properties.

7. On the **Customers** form, click the **CustomerID** label (not its text box).

The label is surrounded by a thick orange border.

8. On the **Format** contextual tab, in the **Font** group, click the **Font Size** arrow, and then in the list, click **8**.

The label text is now significantly smaller.

9. Click the **CustomerID** text box (not its label), and then on the **Design** contextual tab, in the **Tools** group, click the **Property Sheet** button.

Keyboard Shortcut Press Alt+Enter to display the Property Sheet.

See Also For more information about keyboard shortcuts, see "Keyboard Shortcuts" at the end of this book.





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The Property Sheet for this form opens and displays the properties for the object whose name appears in the text box at the top of the pane. Above the box, the type of object is identified. The properties are organized below the box on four pages: Format, Data, Event, and Other. You can display all the properties on one page by clicking the All tab.

CustomerID			•
Format Data	Event	Other	All
Control Source		Cu	stomerID 🖵 🛄
Text Format		Pla	in Text
Input Mask			
Default Value			
Validation Rule			
Validation Text			
Filter Lookup		Dat	tabase Default
Enabled		Yes	
Locked		No	
Smart Tags			

The Data properties of the CustomerID text box control.

Tip Don't change the properties on the Data page until you know more about controls and their sources.

10. In the **Property Sheet**, click the **Format** tab.

All the commands available in the Font group on the Format tab of the ribbon (plus a few more) are available on this page of the Property Sheet.

	Customers	x						×
	10		Selection	n type: `	Text Box			
_		stomers	Custom	erID			•	
	<u>+</u>		Format	Data	Event	Oth	er All	
	CustomerID	ACKPI	Format					
			Decimal	Places			Auto	
	FirstName	Pilar	Visible				Yes	
			Show D	ate Pick	er		For dates	
	LastName	Ackerman	Width				6.8229"	
	Eastranto	Acconnan	Height				0.2493"	
	Address	0000 Baroldo av St	Тор				0.25"	-
	Address	8808 Backbay St.	Left				1.3542"	-
			Back Sty				Normal	-
			Back Co				Background 1	-
	City	Belle∨ue	Border ! Border !				Solid Hairline	-
			Border					
	Region	WA	Special				Background 1, I Flat	-
	Ŭ		Scroll B				None	
	PostalCode	88004	Font Na				Century Gothic	
	1 031010000	00004	Font Siz				11	-
	Country	110.4	Text Alio				Left	
	Country	USA	Font W	<i>.</i>			Normal	
			Font Ur	nderline			No	
	PhoneNumbe	(425) 555-0194	Font Ita	lic			No	
	i		Fore Co	lor			Text 1, Lighter 2	!
Re	cord: M 🚽 1 of 110 🕨	🕨 🌬 🦹 🔆 No Filter 🛛 Search	Line Spa	acina			٥°	Ŧ

The Format properties for the CustomerID text box control.

- **11.** On the **Format** page, click **Font Size**, click the arrow to the right of the adjacent property, and in the list, click **8**.
- **12.** Set the **Font Weight** property to **Bold**.

On the form, the entry in the CustomerID text box reflects your changes.

Tip Sometimes the Property Sheet might obscure your view of the controls on the form. You can change the width of the Property Sheet or of any task pane by dragging its left border to the left or right. You can undock the Property Sheet from the edge of the window and move it elsewhere by dragging its title bar. Double-click the title bar to dock it again.

13. At the right end of the box at the top of the **Property Sheet**, click the arrow, and then in the object list, click **Label3**.

The FirstName label is now selected. You can display the properties of any object on the form, including the form itself, by clicking the object you want in the object list. 14. Repeat step 11 to change the font size of the FirstName label to 8 points.You have now made changes to three controls on this form.

	x	Property Sheet	×
🖄 Custo	omers	Selection type: Label	•
•			ther All
CustomerID	ACKPI	Caption	FirstName 🔺
FirstName	Pilar	Visible Width	Yes 1.0611"
LastName	Ackerman	Height Top Left	0.25" 0.625" 0.25"
Address	8808 Backbay St.	Back Style Back Color	Transparent Background 1
		Border Style Border Width	Transparent Hairline
City	Belle∨ue	Border Color Special Effect	Text 1, Lighter 5(Flat
Region	WA	Font Name Font Size	Century Gothic
PostalCode	88004	Text Align Font Weight	Left Normal
Country	USA	Font Underline Font Italic	No No
	(425) 555-0194	Fore Color Line Spacing	Text 1, Lighter 5(0" Transparent
	N No Filter Search	Gridline Style Top Gridline Style Bottom Gridline Style Left	Transparent Transparent

You have applied character formatting to the CustomerID label and text box control, and to the FirstName label.

These different ways of selecting a control and changing its properties provide some flexibility and convenience, but it would be a tedious way to make changes to several controls in a form. The next two steps provide a faster method.

15. In the upper-left corner of the dotted frame surrounding all the controls on the form, click the **Select All** button.

All the controls within the dotted frame are now surrounded by thick orange borders to indicate that they are selected. In the Property Sheet, the selection type is *Multiple selection*, and the box below is blank. Only the Format settings that are the same for all the selected controls are displayed. Because the changes you made in the previous steps are not shared by all the selected controls, the Font Size and Font Weight settings are now blank.

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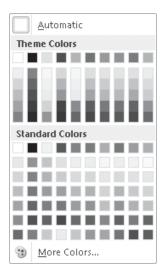
- **16.** Repeat steps 11 and 12 to set the **Font Size** and **Font Weight** properties of the selected controls to **8** and **Bold**.
- 17. With the controls still selected, set the **Back Style** property to **Normal**.

Although you can't see any change, the background of the labels is no longer transparent.

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18. Click the **Back Color** property, and then click the **Ellipsis** button at the right end of the property.

This Ellipsis button has different names and serves different purposes for different properties. In this case, clicking the Ellipsis button displays a color palette.



The colors in this palette reflect the color scheme that is part of the Austin theme.

19. Under **Theme Colors** in the palette, click the third box (**Light Green, Background 2**).

The background of all the controls changes to light green.

Tip If the Back Color palette doesn't include a color you want to use, click More Colors at the bottom of the gallery, select a color on the Standard or Custom page of the Colors dialog box, and then click OK to set the color and add it to the list of recent colors at the bottom of the gallery.

20. Set the **Special Effect** property to **Shadowed**, and the **Border Color** property to the fifth box under **Theme Colors** in the color palette (**Green, Accent 1**).

21. In the form, click away from the selected controls to release the selection.You can now see the results.

E Customers	×	Property Sheet	×	
Cu:	stomers	Selection type: Section Detail	•	
CustomerID	ACKPI		Other All	
FirstName	Pilar	Visible Height Back Color	Yes v 3.7451" Background 1	
LastName	Ackerman	Alternate Back Color Special Effect	Background 1, Darl Flat	
Address	8808 Backbay St.	Can Grow Can Shrink	Yes No No	
City	Rellevue	Display When Keep Together Force New Page	Always No None	
		New Row Or Col	None	
PostalCode	88004	-		
Country	USA			
PhoneNumber	(425) 555-0194			
Selection type: Section Detail CustomerID ACKPI FirstName Pilar LastName Ackerman Address 8808 Backbay St. City Bellevue Region WA PostalCode 88004				

Applying a color and shadow to the labels and text boxes makes them stand out.

- 22. In the form, click the **FirstName** label. Then in the **Property Sheet**, click the **Caption** property, change **FirstName**: to **First Name**, and press Enter.
- 23. Repeat step 22 to change LastName to Last Name and PhoneNumber to Phone.

Tip Changing the Caption property of the form does not affect the Caption property of the table.

24. On the Quick Access Toolbar, click the **Save** button to save the design of the **Customers** form, and then close it.

The Property Sheet attached to the form also closes.

CLEAN UP Retain the GardenCompany03 database for use in the last exercise.

Changing the Arrangement of Forms

Forms generated with the Form tool are functional, not fancy. By default, they are arranged in the Stacked layout, which arranges all the label controls in a single column on the left and all their corresponding text box controls in a single column to their right. All the boxes of each type are the same size, and in the boxes, the text is left-aligned.

If it suits the needs of your data better to display records in a tabular layout much like that of a table in Datasheet view, you can click Tabular in the Table group on the Arrange contextual tab.

See Also For more information about layouts, see the sidebar "Layouts" in Chapter 9, "Create Custom Reports."

If the default layout doesn't suit your needs or preferences, you can customize it. Most of the rearranging you are likely to want to do can be accomplished in Layout view, where you can see the impact on the underlying data. If you want to make more extensive changes to the layout of a non-Web database, you can switch to Design view.

See Also For information about customizing forms in Design view, see Chapter 7, "Create Custom Forms."

In Layout view, you can do the following to improve the form's layout and make it attractive and easy to use:

- Add and delete a variety of controls
- Change the size, color, and effects of controls
- Move controls
- Change text alignment
- Change control margins

Tip The order in which you make changes can have an impact on the results. If you don't see the expected results, click the Undo button on the Quick Access Toolbar to reverse your previous action, or click the Undo arrow, and click an action in the list to reverse more than one action.

In this exercise, you'll size, align, and rearrange the label and text box controls in a form.

- **SET UP** You need the GardenCompany03 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany03 database, and then follow the steps.
 - 1. In the Navigation pane, under Forms, right-click Customers, and click Layout View.

Because the Property Sheet was open when you last closed the form, it opens with the form.

2. Click the **CustomerID** label (not its text box), and on the **Arrange** contextual tab, in the **Rows & Columns** group, click the **Select Column** button.

Tip You can also point above the selected control, and when the pointer changes to a single downward-pointing arrow, click to select the column of controls.

 With all the labels selected, on the Format page of the Property Sheet, set the Text Align property to Right.

All the labels are right-aligned in their boxes. The Property Sheet indicates that by default, the Width property of the labels is 1.0611".

	Customers		×	(Property Sheet	×
	M Cust	omers	4		Selection type: Multiple sel	
<u> </u>	Customers Customers Customers CustomerD ACKPI CustomerID ACKPI First Name Pilar Last Name Ackerman Address B808 Backbay St. City Bellevue Region WA PostalCode B8004 Country USA Phone (425) 555-0194				-	
•		ACKDI			Format Data Event O	ther All
	CostomenD	ACKFI	×		Caption	*
					Visible	Yes
	First Name	Pilar			Width	1.0611"
					Height	
	Last Name	Ackerman			Тор	
	Lusi Hume	Ackennun			Left	0.25"
					Back Style	Normal
	Address	8808 Backbay St.	_		Back Color	Background 2
	Address boob buckbury si		=		Border Style	Solid
					Border Width	3 pt
	Ciby	Rollovuo			Border Color	Accent 1
	City	Dellevoe			Special Effect	Shadowed
					Font Name	Century Gothic
	Region	WA			Font Size	8
					Text Align	Right 🔍
	PostalCode	88004	0.0241030000000		Font Weight	Bold
	PosidiCode	00004			Font Underline	No
					Font Italic	No
	Country	USA			Fore Color	Text 1, Lighter 5(
					Line Spacing	0"
	Dharas	(425) 555 0104		_	Gridline Style Top	Transparent
	Phone	(425) 555-0194			Gridline Style Bottom	Transparent
Red	ord: 🕪 🔸 1 of 110 🔶	🕨 🌬 🛛 🙀 No Filter	Search		Gridline Style Left	Transparent

You can efficiently adjust the alignment of multiple controls by changing the Text Align property in the Property Sheet.

🔢 Select Column

- Point to the right border of the CustomerID label, and when the pointer changes to a two-headed horizontal arrow, drag to the left until CustomerID just fits in its box.
- 5. In the **Property Sheet**, adjust the **Width** property to **0.8**", and press Enter.

Tip It is often easier to adjust the size of controls visually and then fine-tune them in the Property Sheet than it is to guess what property settings might work.

6. Select the **CustomerID** text box (not its label), and change its **Width** property to **1.5**".

Tip Throughout this book, we refer to measurements in inches. If your computer is set to display measurements in centimeters, substitute the equivalent metric measurement. As long as you are entering the default units, you don't have to specify the unit type.

The width of all the text box controls is adjusted, not just that of the CustomerID text box.

E Customers	×	Property Sheet		×
		Selection type: Text Box		
	Π	CustomerID	•	
	Selection type: Text Box CustomerID ACKPI Pilar Ackerman Ackerman Bala Event Other Format Decimal Places Ackerman Balos Backbay St. Bellevue Balos Color Balor Style Back Color Balor S	ther All		
ACKIT			Other All Auto Yes For dates 1.5" 0.2493" 0.25" 1.1146" Normal Background 2 Solid 3 pt Accent 1 Shadowed None Century Gothic	*
				12 thic I
First Name Pilar				
Last Name Ackerman				
Eddi Hullic		Height		
Address 8808 Backbay St.				_
			-	
City Rollowup				
City Delicyde				
City Bellevue				
CustomerID ACKPI First Name Pilar Last Name Ackerman Address 8808 Backbay St. City Bellevue Region WA PostalCode 88004 Country USA Phone (425) 555-0194				
rosidicode 00004			-	
		-		
Country USA			Bold	
			No	
	•			
Record: M 🔸 1 of 110 🔸 M 🌬 🦹 📉 No Filter 🛛 Search		Line Spacing	0"	4

In a Stacked layout, all the controls in each column are the same width.

Notice that the controls are different heights. We'll fix that next.

 Above the upper-left corner of the dotted border that surrounds all the controls, click the Select All button to select all the controls within the border. Then in the Property Sheet, set the Height property to 0.25".

8. On the **Arrange** contextual tab, in the **Position** group, click the **Control Margins** button, and then click **Narrow**.

Now all the controls are the same height and width and have the same interior margins.

🗉 Customers 🛛 🗡	<	Property Sheet				×
		Selection type:	Multiple s	electior		
Customers					-	
Customeril ACKPI		Format Data	Event	Other	All	_
CUSTOMEND		Visible		Yes		
		Width				
First Name Pilar		Height		0.2	5"	
		Тор				
Last Name Ackerman		Left				
		Back Style			Normal	
		Back Color			kground 2	
Address 8808 Backbay St.		Border Style			Solid	
		Border Width		3 p		
City Bellevue		Border Color			ent 1	
		Special Effect			adowed	
		Font Name			ntury Gothic	
Region WA		Font Size		8		
		Text Align		Bo	-	
PostalCode 88004		Font Weight Font Underline		No	a	-
		Font Italic		No		
		Fore Color				
Country USA		Line Spacing		0"		
		Gridline Style To	n	-	nsparent	
Phone (425) 555-0194		Gridline Style B			nsparent	
		Gridline Style Le			nsparent	
Record: M 4 1 of 110 + M M K No Filter Search		Gridline Style Ri			nsparent	Ŧ
A COLORADO C						_

You can control not only the size of the controls but also the distance from the control's border to its text.

 Click the Phone label (not its text box), and on the Arrange contextual tab, in the Rows & Columns group, click the Select Row button.

Tip You can also point to the left of the selected control, and when the pointer changes to a single right-pointing arrow, click to select the row of controls.

÷;.

Control Margins *

🛗 Select Row

10. Point anywhere in the selection, and drag upward, releasing the mouse button when the insertion line sits below the **Last Name** label or text box.

The Phone label and text box move to their new location. As you can see, it is easy to move controls within the structure of the Stacked layout. But suppose you want to rearrange the form so that some controls are side by side instead of stacked.

11. Point to the selected label and text box, and try to drag it to the right of the **Last Name** controls above.

The controls will not move out of their columns. They are confined by the Stacked layout applied to the form. To make more extensive layout adjustments, you need to remove the layout from the form.

12. Above the upper-left corner of the dotted border, click the **Select All** button. Then right-click the selection, click **Layout**, and click **Remove Layout**.

The dotted border disappears, and the form is no longer constrained by the Stacked layout.

- **13.** Click the **Last Name** label, and then press the Delete key.
- 14. Click the **LastName** text box, point to the **A** in *Ackerman*, and when the pointer is shaped like a four-headed arrow, drag up and to the right until the pointer sits slightly to the right of the **FirstName** text box.

When you release the mouse button, the control snaps to an invisible grid that helps maintain consistent spacing on the form.

- 15. In the **Property Sheet**, adjust the **Left** property to 2.7".
- **16.** Hold down the Shift key, and click the two adjacent controls to add them to the selection. Then top-align the controls by setting the **Top** property to **0.6**".
- 17. Click the First Name label, and change the label's Caption property to Name.
- **18.** Rearrange the remaining controls in logical groupings on the form, and then close the **Property Sheet**.

We adjusted the position of the phone controls and then grouped and sized the address controls.

= Customers	×
🖆 Customers	
CustomerID ACKPI Name Pilar Ackerman Phone (425) 555-0194	
Address 8808 Backbay St. City/State/ZIP Bellevue WA 88004	
Country	
Record: H 🔸 1 of 110 🕨 H 📲 🦹 No Filter Search 🛛 🗰	

In Layout view, this kind of arrangement can be achieved only if you remove the default layout, which constrains the controls in columns.

Tip If you rearrange controls or add new controls to a form and then find that pressing Tab jumps around erratically instead of sequentially from one control to the next, you can change the tab order. When working in Layout view, you click the Other tab in the Property Sheet and set the Tab Index property for each control in the tab order you want. When working in Design view, you click the Tab Order button in the Tools group on the Design tab to display the Tab Order dialog box, where you can drag fields into the correct order. For more information about working with forms in Design view, see Chapter 7, "Create Custom Forms."

19. Close the **Customers** form, clicking **Yes** when prompted to save its layout.

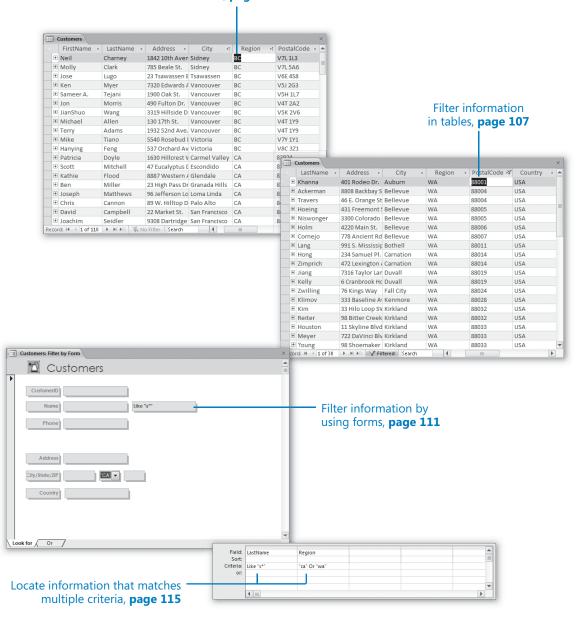
CLEAN UP Close the GardenCompany03 database.

Key Points

- The quickest way to create a form that includes all the fields from one table is by using the Form tool. You can then use the form to view and enter records.
- A form that is based on a table is bound to that form. The table is called the *record source*.
- By default, the form displays one text box control and its associated label control for each field in the table.
- Each text box control is bound to its field, which is called the *control source*.
- Each control has several properties that you can change in Layout view or Design view to improve the look and layout of the form.

Chapter at a Glance

Sort information in tables, **page 102**



4 Display Data

In this chapter, you will learn how to

- Sort information in tables.
- ✓ Filter information in tables.
- ✓ Filter information by using forms.
- ✓ Locate information that matches multiple criteria.

A database is a repository for information. It might contain only a few records or thousands of records, stored in one table or multiple tables. No matter how much information a database contains, it is useful only if you can locate the information you need when you need it. In a small database, you can find information simply by scrolling through a table until you find what you are looking for. But as a database grows in size and complexity, locating and analyzing information becomes more difficult.

Microsoft Access 2010 provides a variety of tools you can use to organize the display of information stored in a database. For example, you can organize all the records in a table by quickly sorting it based on any field or combination of fields. You can also filter the table so that information containing a combination of characters is displayed or excluded from the display.

In this chapter, you'll first sort information in a table based on one and two columns. Then you'll explore three ways to filter tables and forms to display only the records that meet specific criteria.

Practice Files Before you can complete the exercises in this chapter, you need to copy the book's practice files to your computer. The practice file you'll use to complete the exercises in this chapter is in the Chapter04 practice file folder. A complete list of practice files is provided in "Using the Practice Files" at the beginning of this book.

Sorting Information in Tables

You can sort the information stored in a table based on the values in one or more fields, in either ascending or descending order. For example, you could sort customer information alphabetically by last name and then by first name. This would result in the order found in telephone books.

Last Name	First Name
Smith	Brian
Smith	Denise
Smith	Jeff
Taylor	Daniel
Taylor	Maurice

Sorting a table groups all entries of one type together, which can be useful. For example, to qualify for a discount on postage, you might want to group customer records by postal code before printing mailing labels.

Access can sort by more than one field, but it always sorts sequentially from left to right. You can sort by the first field, and if the second field you want to sort by is to the right of the first, you can then add the next field to the sort. If you want to sort by more than one field in one operation, the fields must be adjacent, and they must be arranged in the order in which you want to sort them.

See Also For information about moving fields, see "Manipulating Table Columns and Rows" in Chapter 2, "Create Databases and Simple Tables."

Tip You can sort records while viewing them in a form. Click the field on which you want to base the sort, and then click the Sort command you want. You can't sort by multiple fields at the same time in Form view, but you can sort by one field and then the next to achieve the same results.

In this exercise, you'll sort records first by one field, and then by multiple fields.

SET UP You need the GardenCompany04_start database located in your Chapter04 practice file folder to complete this exercise. Open the GardenCompany04_start database, and save it as *GardenCompany04*. Then follow the steps.

1. With **All Access Objects** displayed in the **Navigation** pane, under **Tables**, doubleclick **Customers**.

The Customers table opens in Datasheet view.

2. Click the arrow to the right of the **Region** field name.

A list of sorting and filtering options appears.

A Z↓	Sort A to Z
Z A♥	S <u>o</u> rt Z to A
$\overline{\mathbb{K}}$	Clear filter from Region
	Text <u>F</u> ilters ▶
	 ✓ (Select All) ✓ (Blanks) ✓ BC ✓ CA ✓ ID ✓ MT ✓ OR ✓ Québec ✓ UT ✓ WA ✓ OK Cancel

The list at the bottom includes check boxes for every unique value in the field.

3. Click **Sort A to Z**.

Access rearranges the records in alphabetical order by region.

	C	Customers						×
		FirstName 👻	LastName 👻	Address 👻	City 👻	Region 🚽	PostalCode 👻	
	+	Jose	Lugo	23 Tsawassen E	Tsawassen	BC	V6E 4S8	
1	+	Neil	Charney	1842 10th Aven	Sidney	BC	V7L 1L3	
1	+	Mike	Tiano	5540 Rosebud I	Victoria	BC	V7Y 1Y1	
1	+	Molly	Clark	785 Beale St.	Sidney	BC	V7L 5A6	
1	+	JianShuo	Wang	3319 Hillside D	Vancouver	BC	V5K 2V6	
1	+	Sameer A.	Tejani	1900 Oak St.	Vancouver	BC	V5H 1L7	
1	+	Jon	Morris	490 Fulton Dr.	Vancouver	BC	V4T 2A2	
1	+	Ken	Myer	7320 Edwards A	Vancouver	BC	V5J 2G3	
1	+	Michael	Allen	130 17th St.	Vancouver	BC	V4T 1Y9	
1	+	Hanying	Feng	537 Orchard Av	Victoria	BC	V8C 3Z1	
1	+	Terry	Adams	1932 52nd Ave.	Vancouver	BC	V4T 1Y9	
1	+	Kathie	Flood	8887 Western A	Glendale	CA	81203	
1	+	David	Simpson	45 Park St.	San Jose	CA	85123	
1	+	Scott	Mitchell	47 Eucalyptus [Escondido	CA	82029	
1	+	Patrick	Sands	98 N. Hyde St.	San Francisco	CA	84140	
1	+	Joachim	Seidler	9308 Dartridge	San Francisco	CA	84167	
1	+	Carole	Poland	10 Pepper Dr.	San Jose	CA	85111	
1	+	David	Campbell	22 Market St.	San Francisco	CA	84112	
1	+	Patricia	Doyle	1630 Hillcrest V	Carmel Valley	CA	83924	Ŧ
Rec	or	d: 🖂 🕂 1 of 110	NO NO	Filter Search	•		Þ	

The upward-pointing arrow at the right end of the Region field name indicates that the table is sorted in ascending order on this field.

Z Descending

 To reverse the sort order by using a different method, on the Home tab, in the Sort & Filter group, click the Descending button.

The sort order reverses. The records for customers living in Washington (WA) are now at the top of the list, and the arrow at the right end of the field name is pointing downward.

In both sorts, the region was sorted alphabetically, but the City field was left in a seemingly random order. Suppose you want to see the records arranged by city within each region. You can do this by sorting the City field and then sorting the Region field.

5. Click the arrow to the right of the **City** field name, and then click **Sort A to Z**.

Access sorts the records alphabetically by city.

 To finish the process, right-click anywhere in the **Region** column, and then click Sort A to Z.

The two fields are now sorted so that the cities are listed in ascending order within each region.

(III (Customers					>	×
4	FirstName 👻	LastName 👻	Address 👻	City 🚽	Region 🚽	PostalCode 👻	*
+	Neil	Charney	1842 10th Aven	Sidney	BC	V7L 1L3	
+	Molly	Clark	785 Beale St.	Sidney	BC	V7L5A6	=
+	Jose	Lugo	23 Tsawassen E	Tsawassen	BC	V6E 4S8	-
+	Ken	Myer	7320 Edwards A	Vancouver	BC	V5J 2G3	
+	Sameer A.	Tejani	1900 Oak St.	Vancouver	BC	V5H 1L7	
+	Jon	Morris	490 Fulton Dr.	Vancouver	BC	V4T 2A2	
+	JianShuo	Wang	3319 Hillside D	Vancouver	BC	V5K 2V6	
+	Michael	Allen	130 17th St.	Vancouver	BC	V4T 1Y9	
+	Terry	Adams	1932 52nd Ave.	Vancouver	BC	V4T 1Y9	
+	Mike	Tiano	5540 Rosebud I	Victoria	BC	V7Y 1Y1	
+	Hanying	Feng	537 Orchard Av	Victoria	BC	V8C 3Z1	
+	Patricia	Doyle	1630 Hillcrest V	Carmel Valley	CA	83924	
+	Scott	Mitchell	47 Eucalyptus [Escondido	CA	82029	
+	Kathie	Flood	8887 Western A	Glendale	CA	81203	
+	Ben	Miller	23 High Pass Dr	Granada Hills	CA	81344	
+	Joseph	Matthews	96 Jefferson Lo	Loma Linda	CA	82350	
+	Chris	Cannon	89 W. Hilltop D	Palo Alto	CA	84306	
+	David	Campbell	22 Market St.	San Francisco	CA	84112	
÷	Joachim	Seidler	9308 Dartridge	San Francisco	CA	84167	Ŧ
Recor	d: 🛯 🚽 1 of 110	🕨 🖬 🛤 🖹 🕅 No	Filter Search	•			

Both the City and Region field names have upward-pointing arrows.

A Remove Sort

 On the Home tab, in the Sort & Filter group, click the Remove Sort button to clear the sort from both fields. The table reverts to the previously saved sort order. Now let's sort both columns at the same time.

 Click the City field name, hold down the Shift key, and click the Region field name. Then in the Sort & Filter group, click the Ascending button.

Because the City field is to the left of the Region field, Access cannot achieve the result you want.

	C	Customers					×
2		FirstName 👻	LastName 👻	Address 👻	City 🚽	Region 🚽	PostalCode 👻 🔺
E	+	Rob	Young	231 N. Ukiah Ro	Aloha	OR	87006
E	+	Sandra I.	Martinez	780 West Blvd.	Arlington	WA	88223
E	+	Karan	Khanna	401 Rodeo Dr.	Auburn	WA	88001
E	+	Ted	Bremer	311 87th Pl.	Beaverton	OR	87008
E	+	Helge	Hoeing	431 Freemont S	Bellevue	WA	88005
E	+	Pilar	Ackerman	8808 Backbay S	Bellevue	WA	88004
E	+	Chad	Niswonger	3300 Colorado	Bellevue	WA	88005
E	+	Shirleen H.	Travers	46 E. Orange St	Bellevue	WA	88004
E	+	Cecilia	Cornejo	778 Ancient Rd	Bellevue	WA	88007
E	+	Michael	Holm	4220 Main St.	Bellevue	WA	88006
E	+	Lola	Jacobsen	998 Kirk Rd.	Bellingham	WA	88227
E	+	Richard	Lum	187 Suffolk Ln.	Boise	ID	73704
E	+	Eric	Lang	991 S. Mississip	Bothell	WA	88011
E	+	Modesto	Estrada	511 Lincoln Ave	Burns	OR	87710
E	+	Randall	Boseman	55 Grizzly Peak	Butte	MT	49707
E	+	Patricia	Doyle	1630 Hillcrest V	Carmel Valley	CA	83924
E	+	Qin	Hong	234 Samuel Pl.	Carnation	WA	88014
E	+	Karin	Zimprich	472 Lexington	Carnation	WA	88014
E	+	Guy	Gilbert	79 S. Wyatt St.	Clinton	WA	88236 💌
Rec	or	d: 🖂 🔸 1 of 110	🕨 🖬 🛤 🕅 🕅 🕅	Filter Search	•		•

The City sort is overriding the Region sort.

- 9. Clear the sort, and then click away from the **City** and **Region** fields to clear the selection.
- **10.** Click the **Region** field name, and drag the field name to the left of the **City** field name, releasing the mouse button when a heavy black line appears between the **Address** and **City** field names.
- **11.** With the **Region** field selected, hold down the Shift key, and click the **City** field name to include that field in the selection.
- **12.** In the **Sort & Filter** group, click the **Ascending** button.

Access arranges the records with the regions in ascending order and the cities in ascending order within each region.

A Ascending

 Experiment with various ways of sorting the records to display different results. Then close the **Customers** table, clicking **No** when prompted to save the table layout.

CLEAN UP Retain the GardenCompany04 database for use in later exercises.

How Access Sorts

The concept of sorting seems quite intuitive, but sometimes the way Access sorts numbers might seem puzzling. In Access, numbers can be treated as either text or numerals. Because of the spaces, hyphens, and punctuation typically used in street addresses, postal codes, and telephone numbers, the data type of these fields is usually Text, and the numbers are sorted the same way as all other text. In contrast, numbers in a field assigned the Number or Currency data type are sorted as numerals.

When Access sorts text, it sorts first on the first character in the selected field in every record, then on the next character, then on the next, and so on—until it runs out of characters. When Access sorts numbers, it treats the contents of each field as a single value, and sorts the records based on that value. This tactic can result in seemingly strange sort orders. For example, sorting the list in the first column of the following table as text produces the list in the second column. Sorting the same list as numerals produces the list in the third column.

Original	Sort as text	Sort as numerals
1	1	1
1234	11	3
23	12	4
3	1234	11
11	22	12
22	23	22
12	3	23
4	4	1234

If a field with the Text data type contains numbers, you can sort the field numerically by padding the numbers with leading zeros so that all entries are the same length. For example, 001, 011, and 101 are sorted correctly even if the numbers are defined as text.

Filtering Information in Tables

Sorting the information in a table organizes it in a logical manner, but you still have the entire table to deal with. For locating only the records containing (or not containing) specific information, filtering is more effective than sorting. For example, you could quickly create a filter to locate only customers who live in Seattle, only items that were purchased on January 13, or only orders that were not shipped by standard mail. When you filter a table, Access doesn't remove the records that don't match the filter; it simply hides them.

The Filter commands are available in the Sort & Filter group on the Home tab, on the menu displayed when you click the arrow at the right end of a field name, and on the shortcut menu displayed when you right-click anywhere in a field's column. However, not all Filter commands are available in all of these places.

To filter information by multiple criteria, you can apply additional filters to the results of the first one.

Tip You can filter records while displaying them in a form by using the same commands as you do to filter records in a table.

In this exercise, you'll filter records by using a single criterion and then by using multiple criteria.

SET UP You need the GardenCompany04 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany04 database, and then follow the steps.

- 1. In the **Navigation** pane, under **Tables**, double-click **Customers** to open the **Customers** table in Datasheet view.
- 2. In the **City** field, click any instance of **Vancouver**.
- **3.** On the **Home** tab, in the **Sort & Filter** group, click the **Selection** button, and then in the list, click **Equals "Vancouver"**.

Access displays a small filter icon shaped like a funnel at the right end of the City field name to indicate that the table is filtered by that field. The status bar at the bottom of the table has changed from *1 of 110* to *1 of 6* because only six records have the value Vancouver in the City field. Also on the status bar, the Filter status has changed to Filtered.



Filter

П	0	Customers						×
		CustomerID -	FirstName 👻	LastName 👻	Address 👻	City 🖓	Region 👻	P
	+	ADATE	Terry	Adams	1932 52nd Ave.	Vancouver	BC	V
	+	ALLMI	Michael	Allen	130 17th St.	Vancouver	BC	ν
	+	MORJO	Jon	Morris	490 Fulton Dr.	Vancouver	BC	٧
	+	MYEKE	Ken	Myer	7320 Edwards A	Vancouver	BC	ν
	+	TEJSA	Sameer A.	Tejani	1900 Oak St.	Vancouver	BC	٧
	+	WANJI	JianShuo	Wang	3319 Hillside D	Vancouver	BC	٧
*								
Rei	cor	d: I4 → 1 of 6	► N NS V Fil	tered Search	•	1111		D

Only the six records for customers who live in Vancouver are displayed in the table.

Tip In the list displayed when you click the arrow to the right of a field name (or the Filter button in the Sort & Filter group) are check boxes for all the unique entries in the active field. Clearing the Select All check box clears all the boxes, and you can then select the check boxes of any values you want to be displayed in the filtered table.

In the Sort & Filter group on the Home tab, the Toggle Filter button is now active. You can use this button to quickly turn the applied filter on and off.

4. In the **Sort & Filter** group, click the **Toggle Filter** button.

Access displays all the records. If you click the Toggle Filter button again, the filter will be reapplied.

Now let's display a list of all customers with postal codes starting with 880.

5. Click the arrow to the right of the **PostalCode** field name, and point to **Text Filters** in the list.

A list of criteria appears.

A Z↓ Z↓ A↓	<u>S</u> ort A to Z S <u>o</u> rt Z to A		
\mathbb{K}	Clear filter from PostalCode		
	Text Eilters	•	<u>E</u> quals Does <u>N</u> ot Equal Be <u>gi</u> ns With D <u>o</u> es Not Begin With Cont <u>a</u> ins <u>D</u> oes Not Contain Ends Wi <u>t</u> h Does Not End Wit <u>h</u>

You can specify criteria for the text you want to find.

Tip The sort and filter options displayed when you click the arrow to the right of a field name (or when you click the Filter button in the Sort & Filter group) are determined by the data type of the field. The PostalCode field is a Text field to allow for ZIP+4 codes. If you display the sort and filter list for a field that is assigned the Number data type, the sort and filter list includes Number Filters instead of Text Filters, and different options are available.

6. In the list, click **Begins With**.

The Custom Filter dialog box opens.

Custom Filter		? ×
PostalCode begins with		
	ОК	Cancel

The name of the text box is customized with the field name and the filer you chose.

7. In the **PostalCode begins with** box, type **880**. Then click **OK**.

Access filters the table and displays only the records that match your criteria.

	LastName -	Address 🗸	City -	Region -	PostalCode 💞	Country -	×
Ē	Khanna	401 Rodeo Dr.	,	WA	88001	USA	
	Ackerman	8808 Backbay S		WA	88004	USA	-
	Travers	46 E. Orange St		WA	88004	USA	-
+	Hoeing	431 Freemont §	Bellevue	WA	88005	USA	
+	Niswonger	3300 Colorado	Bellevue	WA	88005	USA	
+	Holm	4220 Main St.	Bellevue	WA	88006	USA	
+	Cornejo	778 Ancient Rd	Bellevue	WA	88007	USA	_
+	Lang	991 S. Mississip	Bothell	WA	88011	USA	
+	Hong	234 Samuel Pl.	Carnation	WA	88014	USA	
+	Zimprich	472 Lexington /	Carnation	WA	88014	USA	
+	Jiang	7316 Taylor Lan	Duvall	WA	88019	USA	
+	Kelly	6 Cranbrook Hc	Duvall	WA	88019	USA	
+	Zwilling	76 Kings Way	Fall City	WA	88024	USA	
+	Klimov	333 Baseline Av	Kenmore	WA	88028	USA	
+	Kim	33 Hilo Loop SV	Kirkland	WA	88032	USA	
+	Reiter	98 Bitter Creek		WA	88032	USA	
+	Houston	11 Skyline Blvd	Kirkland	WA	88033	USA	
	Meyer	722 DaVinci Bly		WA	88033	USA	
	Young	98 Shoemaker		WA	88033	USA	-
	roung d: M	► N N Y Fill		VVA	00055	USA 🕨	

Only the 30 records for customers who live in postal codes starting with 880 are displayed in the table.

8. In the **Sort & Filter** group, click the **Toggle Filter** button to remove the filter and display all the records.

Now let's display only the records of the customers who live outside of the United States.

9. In the **Country** field, right-click any instance of **USA**, and then click **Does Not Equal "USA"**.

Find

Tip In this case, it is easy to right-click the text you want to base this filter on. If the text is buried in a large table, you can quickly locate it by clicking the Find button in the Find group on the Home tab, entering the term you want in the Find What box in the Find And Replace dialog box, and then clicking Find Next.

Access displays the records of all the customers from countries other than the United States (in this case, only Canada).

- **10.** Remove the filter, and close the **Customers** table, clicking **No** when prompted to save your changes.
- 11. Open the **Orders** table in Datasheet view.
- **12.** In the **EmployeeID** field, right-click **Emanuel**, **Michael**, and then click **Equals** "**Emanuel**, **Michael**".

Twenty records are displayed in the filtered table.

13. In the OrderDate field, right-click 2/1/2010, and then click On or After 2/1/2010.

Tip To see a list of the available options for date filters, right-click any cell in the OrderDate field, and then point to Date Filters.

You now have a list of the orders customers placed with the selected employee on or after the specified date. You could continue to refine the list by filtering on another field, or you could sort the results by a field.

14. Close the **Orders** table, clicking **No** when prompted to save the table layout.



CLEAN UP Retain the GardenCompany04 database for use in later exercises.

Filtering Information by Using Forms

When you want to filter a table based on the information in several fields, the quickest method is to use the Filter By Form command, which is available from the Advanced Filter Options list in the Sort & Filter group on the Home tab. When you choose this command with a table displayed, Access displays a filtering form that resembles a datasheet. Each of the cells in the form has an associated list of all the unique values in that field in the underlying table.

	Customers: Filter	r by Form						×
\square	CustomerID	FirstName	LastName	Address	City		Region	Po
						•		
					/	<u> </u>		
					Arlington			
					Auburn			
					Beaverton			
					Bellevue			
					Bellingham			
					Boise			
					Bothell			
					Burns			
					Butte			
					Carmel Valle			
					Carnation			
					Clinton			
					Duvall			
					Elgin			
					Escondido	-		
	ook for Or							

Using the Filter By Form command with a table.

For each field, you can select a value from the list or type a value. When you have finished defining the values you want to see, you click the Toggle Filter button to display only the records that match your selected criteria.

Using Filter By Form on a table that has only a few fields, such as the one shown above, is easy. But using it on a table that has a few dozen fields can be cumbersome, and it is often simpler to find information in the form version of the table. When you choose the Filter By Form command with a form displayed, Access filters the form the same way it filters a table.

Customers: Filter by Form		×
🖄 Customer	S	
CustomerID Name Phone		
Address		
City/State/ZIP		
Country	BC CA ID MT OR Québec UT WA	•
Look for Or		

Using the Filter By Form command with a form.

After you have applied the filter, you move between the matched records by clicking the buttons on the record navigation bar at the bottom of the form page.

In this exercise, you'll filter a form by using the Filter By Form command.

->

SET UP You need the GardenCompany04 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany04 database, and then follow the steps.

1. In the Navigation pane, under Forms, double-click Customers.

The Customers form opens in Form view.

 On the Home tab, in the Sort & Filter group, click the Advanced Filter Options button, and then in the list, click Filter By Form.

The Customers form is replaced by its Filter By Form version, which has two pages: Look For and Or. Instead of displaying the information for one record from the table, the form now has a blank box for each field.

3. Click the second text box to the right of the **Name** label (the box that normally displays the customer's last name), type **s***, and then press Enter.

The asterisk is a wildcard that stands for any character or string of characters. Access converts your entry to *Like "s*"*, which is the proper format, called the *syntax*, for this type of criterion.

See Also For information about wildcards, see the sidebar "Wildcards" following this topic.

4. In the **Sort & Filter** group, click the **Toggle Filter** button.

Access displays the first record that has a LastName value starting with S.

E Customers	×
🖸 Customers	
CustomerID SAMPR Name Prasanna Phone (206) 555-0105	
Address 17331 Fairhaven St. City/State/ZIP Seattle WA 88136 Country USA	
Record: M 4 1 of 6 > > > > > > > > Filtered Search	

The record navigation bar shows that six records match the filter criterion.

 Click the Advanced Filter Options button and then click Filter By Form to redisplay the filter form.

Your filter criterion is still displayed in the form.

Y

Tip No matter what method you use to enter filter criteria, the criteria are saved as a form property and are available until they are replaced by other criteria.

6. Click the second box to the right of the **City/State/ZIP** label (the box that normally displays the state or region), click the arrow that appears, and then in the list, click **CA**.

You are instructing Access to find and display records that have both a Region value of CA *and* LastName values starting with *S*.

Eustomers: Filter by Form	×
🖆 Customers	
CustomerID Name Phone	
Address	
Country	T
Look for Or	

Only records matching both of the criteria will be displayed.

7. Click the Toggle Filter button.

Access displays the first of three records that meet the filtering criteria.

8. Switch back to the filter form, and at the bottom of the form page, click the **Or** tab.

The criteria you entered on the Look For page are still there, but on this page, all the fields are blank so that you can enter alternatives for the same fields.

Tip When you display the Or page, a second Or tab appears so that you can include a third criterion for the same field if you want.

 Type s* in the second Name box, and click WA in the list for the second City/ State/ZIP box.

You are instructing Access to find and display records that have either a Region value of CA *and* LastName values starting with *S*, *or* a Region value of WA *and* LastName values starting with *S*.

- **10.** Click the **Toggle Filter** button.
- **11.** Use the record navigation bar to view the six records in the filtered **Customers** form.
- **12.** Click the **Toggle Filter** button to remove the filter. Then close the form.

CLEAN UP Retain the GardenCompany04 database for use in the last exercise.

Wildcards

If you want to filter a table to display records containing certain information but you aren't sure of all the characters, or if you want your filter to match variations of a base set of characters, you can include wildcard characters in your filter criteria. The most common wildcards are:

- * The asterisk represents any number of characters. For example, filtering the LastName field on *Co** returns records containing *Colman* and *Conroy*.
- ? The question mark represents any single alphabetic character. For example, filtering the FirstName field on *er*?? returns records containing *Eric* and *Erma*.
- # The number sign represents any single numeric character. For example, filtering the ID field on 1## returns any ID from 100 through 199.

Tip Access supports several other wildcards. For more information, search for *wildcards* in Access Help.

When searching for information in a Text field, you can also use the Contains text filter to locate records containing words or character strings.

Locating Information That Matches Multiple Criteria

As long as your filter criteria are fairly simple, filtering is a quick and easy way to narrow down the amount of information displayed in a table or to locate information that matches what you are looking for. But suppose you need to locate something more complex, such as all the orders shipped to Midwestern states between specific dates by either of two shippers. When you need to search a single table for records that meet multiple criteria, or when the criteria involve complex expressions, you can use the Advanced Filter/Sort command, available from the Advanced Filter Options list.

Choosing the Advanced Filter/Sort command displays a design grid where you enter filtering criteria. As you'll see, filters with multiple criteria are actually simple queries.

See Also For information about queries, see Chapter 8, "Create Queries."

7.

In this exercise, you'll filter a table to display the data for customers located in two states. Then you'll experiment with the design grid to better understand its filtering capabilities.

SET UP You need the GardenCompany04 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany04 database, and then follow the steps.

- **1.** In the **Navigation** pane, under **Tables**, double-click **Customers** to open the **Customers** table in Datasheet view.
- 2. On the Home tab, in the Sort & Filter group, click the Advanced Filter Options button, and then in the list, click Advanced Filter/Sort.

The CustomersFilter1 page opens, displaying the Query Designer with the Customers field list in the top pane and the design grid in the bottom pane.

Custom	ers 🗗 CustomersFi	lter1		×
	* CustomerID FirstName LastName Address City Region			
4 III				•
Field: Sort: Criteria:				
or:				
				•

Clicking the Advanced Filter/Sort button displays the Query Designer.

- In the Customers field list, double-click LastName to copy it to the Field row of the first column of the grid.
- 4. In the **Criteria** row of the **LastName** field, type **s***, and then press Enter.

Because you have used the * wildcard, Access changes the criterion to Like "s*".

5. In the **Customers** field list, double-click **Region** to copy it to the **Field** row of the next available column of the grid.

6. In the **Criteria** row of the **Region** field, type **ca or wa**, and then press Enter.

Tip If you want to find the records for customers who live in California or Oregon, you cannot type *ca* or or, because Access treats or as a reserved word. You must type *ca* or "or" in the Criteria row. Anytime you want to enter a criterion that will be interpreted as an instruction rather than a string of characters, enclose the characters in quotation marks to achieve the desired results.

Your entry changes to "*ca*" Or "*wa*". The query will now filter the table to display the records for only those customers with last names beginning with the letter S who live in California or Washington.

	LastName	Region		
Sort:				
Criteria:	Like "s*"	"ca" Or "wa"		
or:				
				· · · · · ·

The grid with two criteria.

Y

7. In the **Sort & Filter** group, click the **Toggle Filter** button to display only records that match the criteria.

Access switches to the Customers table page and displays the filter results.

] (Customers 🗐 C	ustomersFilter1					×
		CustomerID -	FirstName 👻	LastName 🖓	Address 👻	City 👻	Region 📲	P
	+	SAMPR	Prasanna	Samarawickran	17331 Fairhave	Seattle	WA	88
	+	SANPA	Patrick	Sands	98 N. Hyde St.	San Francisco	CA	84
	+	SEIJO	Joachim	Seidler	9308 Dartridge	San Francisco	CA	84
	+	SIMDA	David	Simpson	45 Park St.	San Jose	CA	85
	+	SMIJE	Jeff	Smith	17 Wilken Rd.	La Conner	WA	88
	+	SMISA	Samantha	Smith	74 S. Western [Seattle	WA	88
*								
Re	cor	d: I4 → 1 of 6	🕨 🕨 🛤 🛛 🖓 Fil	tered Search	•	1111		►

Six customers with last names beginning with S live in either California or Washington.

- 8. Click the **CustomersFilter1** tab to switch to the filter page.
- 9. In the or row of the LastName field, type b*, and then press Enter.

We want to filter the table to display only the records for customers with last names beginning with the letter *S* or *B* who live in California or Washington.

	LastName	Region		
Sort:				
Criteria:	Like "s*"	"ca" Or "wa"		
or:	Like "s*" Like "b*"			
				•

The design grid with three criteria.

10. In the Sort & Filter group, click the Toggle Filter button to apply the filter.

On the Customers table page, the result includes records for all customers with last names that begin with *S* or *B*, but some of the *B* names live in Montana and Oregon.

11. Click the **CustomersFilter1** tab to switch to the filter page, and look carefully at the design grid.

The filter first works with the two criteria in the Criteria row and searches for customers with names beginning with *S* who live in California or Washington. Then it works with the criteria in the Or row and searches for customers with names beginning with *B*, regardless of where they live. To get the results we want, we need to repeat the criterion from the Region field in the Or row.

- **12.** In the **or** row of the **Region** field, type **ca or wa**, and then press Enter.
- **13.** Apply the filter.

Access switches to the Customers table page and displays only the records for customers with last names beginning with S or B who are located in California or Washington.

14. Close the **Customers** table, clicking **Yes** when prompted to save changes to the design of the table.

CLEAN UP Close the GardenCompany04 database.

Saving Filters as Queries

If a filter takes more than a few minutes to set up and you are likely to want to use it again, you might want to save it as a query. Then you can run the query to display the filtered results at any time.

To save a filter as a query:

- **1.** On the Home tab, in the Sort & Filter group, click the Advanced Filter Options button and then click Save As Query.
- **2.** In the Save As Query dialog box, assign the query an appropriate name, and then click OK.

See Also For information about queries, see Chapter 8, "Create Queries."

Key Points

- You can sort a table in either ascending or descending order, based on the values in any field (or combination of fields).
- You can filter a table so that information containing a combination of characters is displayed (or excluded from the display).
- You can apply another filter to the results of the previous one to further refine your search.
- The Filter By Form command filters a table or form based on the information in several fields.
- You can use the Advanced Filter/Sort command to search a single table for records that meet multiple criteria.

Chapter at a Glance

1	Alphabetical List of P	roducts		Create re	ports by <i>i</i> izard, page 122	
	ProductName by 1s A					
	Product Name	Quantity Per Unit	Units In Stock			
	Ambrosia	6 - 2" pots	16			
	American Pitcher Plant	l ea.	4			
	Anacharis	l ea.	2			
	Anemone	One dozen	26			
			20			
	Animal repellent	1 qt.	3 Alphabe	tical List of Products		
	Animal trap	l ea.				
< <	1 ► N → K No Filter 4		Alp	habetical List o	f Products	
			, de			
			A	Product Name	Quantity Per Unit	
		Modify report design	,	Ambrosia	6 - 2" pots	
		page 129	•	American Pitcher Plant	1 ea.	
				Anacharis	1 ea.	
				Anemone	One dozen	
				Animal repellent	1 qt.	
				Animal repellent Animal trap	1 qt. 1 ea.	
				Animal trap	1 ea.	
				Animal trap Anise	1 ea. 6 - 2" pots	
				Animal trap Anise Austrian Copper	1 ea. 6 - 2° pots Per plant	
	Alphabetica A Product Name American Product Name American Product Plant American Product Plant American Product Name American Product Namerican Product Namerican Product Nameric	I List of Products Guronity For Dat 4-2" gots 1 ca. 1 ca. 1 ca. 1 ca. 1 ca. 5-2" gots Forglant Perglant One date someware		Animal Irap Anise Austrian Copper Austrian Pine Prev	1 ea. 6 - 2° pots Per plant	
	A Product Name Ambrasia Ambrasia Ambrasia Andreas Animal registant Animal registant Animal registant Animal registant Animal registant	Guronity Fer Unit 4 - 3' go ta 1 ca., 1 ca., Once doscon 1 gr., 1 ca., 6 - 3' go ta	Units in Stock 16 2 3 3 20 7	Animal Irap Anise Austrian Copper Austrian Pine Prev	1 ea. 6 - 2" pots Per plant One gal. container One down	
	A Product Name Ambrasia Amarican Pitcher Plant Anacharis Animal ragislant Animal ragislant Animal ragislant Animal ragislant Animal ragislant Anima Ragi	Gurantity Far Unit 4 - 1' ga ta 1 ca. 1 ca. 1 ca. 1 ga. 4 - 1' ga ta Par giant One gaj. container	Units In Struck 16 4 2 26 3 20 7 10	Animal Irap Anise Austrian Copper Austrian Pine Prev	1 ea. 6 - 2" pots Per plant One gal. container One down	
	Podvict Name Ambroals Ambroals Ambroals Ambroals Ambroals Andhoris Andhoris Andhoris Antmal trap stant Antmal trap Aution Aution Coppor Aution Rina Aution Proces Podvict Name Baby's Brain	Guantity Fer Unit 4 - 3' go ta 1 ca. 1 ca. 1 ca. 1 ca. 1 ca. 4 - 3' go ta 1 ca. 4 - 3' go ta 1 ca. 4 - 3' go ta 1 ca. 1 ca.	Units in Streek 16 2 3 2 5 7 7 10 7 7 10 27 7 10 10 27 10 10 27 10 10 27 10 10 27	Animal Irap Anise Austrian Copper Austrian Pine Prev	1 ea. 6 - 2" pots Per plant One gal. container One down	
	Product Name Amoroals Amoroals Amoroals Amoroals Amoroals Amoroals Anachoris Animolitopoliton Animolitopolito Animolitopolito Animolitopolitopolito Animolitopoliticopolititapolititatea	Gurantity Far Unit 4 - 3' go ta 1 ca. 1 ca. 1 ca. 1 gr. 1 gr. 1 ca. 4 - 3' go ta Par giant One gal. cantainer One decon	Units in Stock 14 4 2 3 3 2 0 7 10 37 Units in Stock	Animal Irap Anise Austrian Copper Austrian Pine Prev	1 ea. 6 - 2" pots Per plant One gal. container One down	

5 Create Simple Reports

In this chapter, you will learn how to

- Create reports by using a wizard.
- Modify report design.
- Preview and print reports.

Like forms, reports give people easy access to the information stored in a database. However, there are several differences between forms and reports, including the following:

- Forms are used to enter, view, and edit information. Reports are used only to view information.
- Forms are usually displayed on-screen. Reports can be previewed on the screen, but they are usually printed.
- Forms generally provide a detailed look at records and are usually for the people who actually work with the database. Reports are often used to group and summarize data, and are often for people who don't work with the database but who use the information stored in the database for other business tasks.

Reports usually present summaries of larger bodies of information. For example, your database might hold detailed information about thousands of orders. If you want to edit those orders or enter new ones, you can do so directly in the table or through a form. If you want to summarize those orders to illustrate the rate of growth of the company's sales, you generate a report.

Like a book report or an annual report of a company's activities, a report created in Microsoft Access 2010 is typically used to summarize and organize information to express a particular point of view to a specific audience. When you are designing a report, it is important to consider the point you are trying to make, the intended audience, and the level of information they will need. In this chapter, you'll create a report by using a wizard. After modifying the layout and content of the report, you'll see how it will look when printed.

Practice Files Before you can complete the exercises in this chapter, you need to copy the book's practice files to your computer. The practice file you'll use to complete the exercises in this chapter is in the Chapter05 practice file folder. A complete list of practice files is provided in "Using the Practice Files" at the beginning of this book.

Creating Reports by Using a Wizard

You can divide the content of an Access report into two general categories: information derived from records in one or more tables, and everything else. The *everything else* category includes the title, page headers and footers, introductory and explanatory text, and any logos and other graphics.

Just as you can create a form that includes all the fields in a table by using the Form tool, you can create a report that includes all the fields by using the Report tool, which is located in the Reports group on the Create tab. But such a report is merely a prettier version of the table, and it does not summarize the data in any meaningful way. You are more likely to want to create a report based on only some of the fields, and that is a job for the Report wizard.

Tip In addition to basing a report on a table, you can base it on the datasheet created when you run a query. For information about queries, see Chapter 8, "Create Queries."

The Report wizard leads you through a series of questions and then creates a report based on your answers. So the first step in creating a report is to consider the end result you want and what information you need to include in the report to achieve that result. After you provide that information, the wizard creates a simple report layout and adds a text box control and its associated label for each field you specify.

For example, you might want to use a Products table as the basis for a report that groups products by category. When you give the grouping instruction to the wizard, it first sorts the table based on the category, and then sorts the products in each category. In the space at the top of each group (called the group *header*), the wizard inserts the name of the category.

In this exercise, you'll use the Report wizard to create a simple report that displays an alphabetical list of products.

• **SET UP** You need the GardenCompany05_start database located in your Chapter05 practice file folder to complete this exercise. Open the GardenCompany05_start database, and save it as *GardenCompany05*. Then follow the steps.

1. With All Access Objects displayed in the Navigation pane, under Tables, click (don't double-click) Categories.



2. On the **Create** tab, in the **Reports** group, click the **Report** button.

Access creates a report based on all the fields in the Categories table, displays the report in Layout view, and adds four Report Layout Tools contextual tabs to the ribbon.

🗛 💭 = 🖓 = (≌ = = Ga	rdenCompany05 : Databas	e (Access 20	Report Layout Tools	_ 0 %
File Home Crea	te External Data D	atabase Tools Design /	Arrange Format Page Setup	۵ 🕜
View A Fonts •		Insert Mage V Numbers 🔂 Date and ols	Time Add Existing Property Fields Sheet Tools	
All Access Objec 🖲 «	Categories			×
Tables				
Categories Customers	Cat	regories		1
Employees		Category Name	Description	
Order Details	1	Bulbs	Spring, summer and f	all forced
Products	2	Cacti	Indoor cactus plants	
Shippers				
Suppliers	3	Ground covers	Herbaceous perenni and deciduous shrub	
Forms A	5		mosses	, ivy, vinos,
Customers	4	Grasses	Lawn grasses for cod	ol climates
	5	Flowers	A wide variety of flo	wers
	6	Wetland plants	Plants suitable for wo	ater gardens a
	7	Soils/sand	Potting soils, peat mo	oss, mulch, barl
	8	Fertilizers	A variety of fertilizers	
		111		
Layout View			Num Lo	ock 🛛 🖾 🖼 🛒

The default report created by the Report tool.

Troubleshooting The appearance of buttons and groups on the ribbon changes depending on the width of the program window. For information about changing the appearance of the ribbon to match our screen images, see "Modifying the Display of the Ribbon" at the beginning of this book. **3.** This is not the report we want, so close the **Categories** report, clicking **No** when prompted to save it.

4. On the **Create** tab, in the **Reports** group, click the **Report Wizard** button.

The Report wizard starts. Because the Categories table is still selected in the Navigation pane, that table is specified in the Tables/Queries box and its fields are listed in the Available Fields box.

5. Display the **Tables/Queries** list, and then click **Table: Products**.

The Available Fields box now lists the fields in the Products table.

Report Wizard	
	Which fields do you want on your report?
	You can choose from more than one table or query.
<u>T</u> ables/Queries	
Table: Products	×
<u>A</u> vailable Fields:	Selected Fields:
ProductID ProductName LatinName SupplierID CategoryID QuantityPerUnit UnitPrice UnitsInStock	 ▶ <
Car	ncel < Back Next > Einish

The first page of the Report wizard with the correct table selected.

 In the Available Fields list, double-click ProductName, QuantityPerUnit, and UnitsInStock to move them to the Selected Fields box.

Tip Fields appear in a report in the order in which they appear in the Selected Fields list. You can save yourself the effort of rearranging the fields in the report by entering them in the desired order in the wizard. 7. At the bottom of the page, click **Next**.

The wizard asks whether you want to group the records. When you group by a field, the report inserts a group header at the top of each group of records that have the same value in that field.

8. In the field list on the left, double-click **ProductName**.

In the preview pane on the right, the wizard moves ProductName into the group header area to show that records will be grouped by this field.

9. In the lower-left corner of the page, click **Grouping Options**.

Report Wizard
Do you want to add any grouping levels? QuantityPerUnit, UnitsInStock
Grouping Intervals
What grouping intervals do you want for group-level fields?
Group-level fields: Grouping intervals: Cancel
Grouping Options Cancel < Back Next > Einish

You can refine the grouping specification in this dialog box.

10. Display the **Grouping intervals** list, click **1st Letter**, and then click **OK**.

The group header now indicates the grouping interval you have assigned to the grouping field.

Report Wizard	
Do you want to add any grouping levels?	ProductName by 1st Letter ProductName, QuantityPerUnit, UnitsInStock
Grouping Options Cancel	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish

The types of grouping intervals available vary depending on the data type of the field by which you are grouping records.

11. Click Next.

The wizard asks how you want to sort and summarize the records.

Report Wizard What sort order and summary info	You can sort	nt for detail records? records by up to four fiel descending order.	ds, in either
	1	•	Ascending
1	2	T	Ascending
	3	v	Ascending
	4	T	Ascending
	Summa	ry Options	
	Cancel <	Back Next >	<u> </u>

You can sort by up to four fields, each in ascending or descending order.

Tip For any field that contains numeric information, you can click Summary Options near the bottom of the wizard page to display the Summary Options dialog box, where you can instruct Access to insert a group footer in the report and to display the sum, average, minimum, or maximum value for the field. The only numeric field in this report is UnitsInStock, and it is not appropriate to summarize that field.

 Click the arrow to the right of the 1 box to display a list of fields, and click ProductName. Then click Next.

The wizard asks which of three layouts and which orientation you want for this report.

Report Wizard		
How would you like to lay out your report?		
	Layout Stepped Block O Qutline	Orientation Portrait Landscape
	Adjust the field wid a page.	th so all fields fit on
Cancel	< <u>B</u> ack <u>N</u> ext	> <u>F</u> inish

The preview on the left shows the effect of the options on the right.

- **13.** In the **Layout** area, click each option in turn to see a preview in the report thumbnail to the left.
- **14.** When you have finished exploring, click **Outline**.
- **15.** With **Portrait** selected in the **Orientation** area and the **Adjust the field width so** all **fields fit on a page** check box selected, click **Next**.

The wizard prompts you to supply a title for the report.

Report Wizard	
	What title do you want for your report? Products
	That's all the information the wizard needs to create your report. Do you want to preview the report or modify the report's design?
[Cancel < <u>B</u> ack <u>N</u> ext > <u>Einish</u>

For ease of use, you should make the title more specific.

16. In the title box, type **Alphabetical List of Products**, and then with **Preview the report** selected, click **Finish**.

Access creates the report and displays it in Print Preview.

Alphabetic	al List of Products			×
				^
A	phabetical List of P	roducts		
				=
F	ProductName by 1s A			
	Product Name	Quantity Per Unit	Units In Stock	
	Ambrosia	6 - 2" pots	16	
	American Pitcher Plant	1 ea.	4	
	Anacharis	l ea.	2	
	Anemone	One dozen	26	
	Animal repellent	1 qt.	3	
	Animal trap	1 ea.	2	
Page: 🖂 🕂 1	► ► ► 🕅 🐺 No Filter 🛛 🖣			

The new report in Print Preview.

17. Page through the nine-page report, noticing how it is arranged. Then close it.

CLEAN UP Retain the GardenCompany05 database for use in later exercises.

Modifying Report Design

You can use the Report wizard to get a quick start on a report, but you will frequently want to modify the report to get the result you need. As with forms, the report consists of text box controls that are bound to the corresponding fields in the underlying table and their associated labels. You can add labels, text boxes, images, and other controls, and you can format them, either by using commands on the ribbon or by setting their properties in the report's Property Sheet.

Tip Property Sheets for reports work the same way as those for forms. For information, see "Changing the Look of Forms" in Chapter 3, "Create Simple Forms."

You can adjust the layout and content of reports in either Layout view or Design view. For simple adjustments, it is easier to work in Layout view, where you can see the layout with live data, making the process more intuitive.

See Also For information about creating and modifying reports in Design view, see Chapter 9, "Create Custom Reports."

Tip Automatic error checking identifies common errors in forms and reports and gives you a chance to fix them. For example, Access informs you if a report is wider than the page it will be printed on. Error checking is turned on by default. If you want to turn it off, display the Backstage view, and click Options to open the Access Options dialog box. In the left pane, click Object Designers, clear the error-checking check boxes at the bottom of the page, and then click OK.

In this exercise, you'll modify the layout of a report. You'll then apply a theme, change some of the colors, and dress up the text with character formatting. You will also apply a simple rule that formats values differently if they meet a specific criterion.

->

SET UP You need the GardenCompany05 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany05 database, and then follow the steps.

- In the Navigation pane, under Reports, right-click the Alphabetical List of Products report, and then click Print Preview.
- 2. Maximize the program window if it isn't already maximized, and then point to the previewed report page.

The pointer changes to a magnifying glass with a plus sign in it.

Alphabetical List of P	roducts		
ProductName by 1s A			
Product Name	(nifty Per Unit	Uhits In Stock	
Ambrosia	6-2' pots	16	
American Pitcher Plant	lea.	4	
Anacharis	lea.	2	
Anemone	One diozen	26	
Animal repellent	lqt	3	
Animal tap	lea.	2	
Anise	6-2" pots	20	
Austrian Copper	Per plant	7	
Austrian Pine	One gal. container	10	
Autumn crocus	One diozen	37	
ProductName by 1s B			
Product Name	Quantity Per Unit	Units In Stock	
Baby's Breath	lea.	23	
Batbox	1 boxperkit	12	
Bea utybush	lea.	2	
Beebaim	lea.	14	
Begonias	ó perpkg.	12	
Beneficial nema todes	1pt	4	
Blockberries	8 storts per pkg	18	
Blodderwort	lea.	ó	
Bladderwort	One 3" starter	5	
Blood meail	3 lbs.	14	
Bone meal	5 lbs.	12	
uesday, Mby 25, 2010			Page 1 of 9
			-

In Print Preview, the magnifying glass pointer indicates that you can zoom in on the page.

3. Click the previewed page once to zoom in.

Tip You can also zoom in and out by dragging the Zoom slider in the lower-right corner of the program window. The current zoom level appears to the left of the slider.

Notice that the report has the following design problems:

O Extraneous text

팝

- Spacey arrangement
- Uninviting formatting

To fix these problems, we need to switch to Layout view.

4. On the **View Shortcuts** toolbar, click the **Layout View** button.

Access adds four Report Layout Tools contextual tabs to the ribbon. First let's work with the group header controls.

 On the Design contextual tab, in the Grouping & Totals group, click the Hide Details button.

The controls that are bound to fields in the Products table are hidden so that you can concentrate on the group header controls.

6. Below the title, click **ProductName by 1s**, and press the Delete key.

The label is removed from all the group headers.

7. Click the control containing **A**, and drag it to the left edge of the header.

When you release the mouse button, all the corresponding controls move to the corresponding location in their own group headers.

Keyboard Shortcut Hold down the Alt key and press the Arrow keys to move the selected control in small increments. When the shadow box is positioned where you want it, click away from the control.

See Also For more information about keyboard shortcuts, see "Keyboard Shortcuts" at the end of this book.

 Point to the right border of the selected A control, and when the pointer changes to a double-headed arrow, drag to the left until the control is just big enough to hold its contents.

Again, all the corresponding controls assume the new size.

Alpha	Alphabetical List of Products				
Al	Alphabetical List of Products				
A	Product Name	Quantity Per			
В	Product Name	Quantity Per			
С	Product Name	Quantity Per			
D		Quantity Pe			

It is easier to work with the controls in the group header when the report details are hidden.

 With the A control still selected, hold down the Shift key, and in turn, click the Product Name, Quantity Per Unit, and Units In Stock label controls to add them to the selection.



10. On the **Design** tab, in the **Tools** group, click the **Property Sheet** button.

The Property Sheet opens.

Property Sheet	×
Selection type: Multiple s	election
Format Data Event	Other All
Visible	Yes 🔺
Width	
Height	
Тор	
Left	
Back Style	
Back Color	Background 1
Border Style	Transparent
Border Width	Hairline
Border Color	
Special Effect	Flat
Font Name	Century Gothic
Font Size	11
Text Align	
Font Weight	Normal
Font Underline	No
Font Italic	No
Fore Color	
Line Spacing	0"
Hyperlink Target	
Gridline Style Top	Transparent
Gridline Style Bottom	
Gridline Style Left	Transparent

Because more than one control is selected, the Selection Type of this Property Sheet is Multiple Selection.

 On the Format page of the Property Sheet, in the Top property box, type 0.25", and press Enter. Then close the Property Sheet.

In the group header, the letter control and label controls are now aligned 0.25 inch from the top of the header, and the height of the header has decreased because less space is needed to accommodate the controls.

Now let's see how the group header looks with its data.

12. In the **Grouping & Totals** group, click the **Hide Details** button to turn it off and display the data from the table.

The numbers in the Units In Stock column are right-aligned. Let's center them.

Click the first text box control under the Units In Stock label, and on the Format contextual tab, in the Font group, click the Center button.

Now we'll add some color and format the text.

14. On the **Design** contextual tab, in the **Themes** group, click the **Themes** button, and in the gallery, click the **Austin** thumbnail.

Although nothing much appears to change, the report takes on the color scheme and font scheme assigned to the selected theme.

15. Inside the shaded area of the report header, but away from the title, click a blank area. On the Format contextual tab, in the Control Formatting group, click the Shape Fill button. Then under Theme Colors in the palette, click the third box (Light Green, Background 2).

Notice that by default, a row color has been applied to alternate group headers and that this coloring confuses rather than clarifies the report structure. Let's turn off this alternate row color.



- 16. Click outside the dotted border to the left of the first group header. In the Background group, click the Alternate Row Color arrow, and at the bottom of the palette, click No Color.
- **17.** In the **Control Formatting** group, click the **Shape Fill** button, and in the palette, click a light brown color.

The entire group header is shaded except the alphabet controls (A, B, C, and so on) that you moved earlier. If you wanted to shade them as well, you could select one of them and repeat step 17 to apply the light brown fill.

18. Click outside the dotted border to the left of the first row of data in the report, and remove the alternate row color of the data rows. Then click the white space above the report header to see the result.

Only the backgrounds of the report header and group headers are now colored.



Themes

🔊 Shape Fill 🤊

Alp	habetical List of Products		
Α	Iphabetical List of F	Products	
	Product Name		Units In
A		Quantity Per Unit	
	Ambrosia	6 - 2" pots	16
	American Pitcher Plant	l ea.	
	Anacharis	1 ea.	
	Anemone	One dozen	26
	Animal repellent	1 qt.	
	Animal trap	l ea.	
	Anise	6 - 2" pots	20
	Austrian Copper	Per plant	
	Austrian Pine	One gal. container	

Removing the alternate row color makes the structure of this report more obvious.

Tip Above the first object and below the last object of a report in Layout view are the only places you can click that don't select at least one object on the report.

19. Click any control, and then in the **Selection** group, click the **Select All** button.

Keyboard Shortcut Press Ctrl+A to select all the controls.

20. In the Font group, click the Font Size arrow, and then click 9.

Tip It is usually most efficient to change the character formatting of all the controls and then adjust the ones you want to be different.

- **21.** Click the report's title control, and then use the commands in the **Font** group to make the text 24 points, bold, and dark green.
- **22.** Select the controls in the group header, and make them bold and dark green.
- **23.** Scroll down the report, noticing that a few of the values in the **Units In Stock** column are 0.

We want these values to stand out in the report to remind buyers that it is time to order more of these products.



🕮 Select All

24. Click any control in the **Units In Stock** column. Then in the **Control Formatting** group, click the **Conditional Formatting** button.

The Conditional Formatting Rules Manager dialog box opens.

25. Click **New Rule**.

The New Formatting Rule dialog box opens.

New Formatting Rule	? ×
Select a rule type:	
Check values in the current record or use an expression Compare to other records	
Edit the rule description:	
Format only cells where the:	
Field Value Is 💌 between	
Preview: No Format Set B I U A -	
OK	Cancel

You can create rules that compare the current field value to a specific value or to other values in the same field.

- **26.** With **Check values in the current record or use an expression** selected as the rule type, in the **Format only cells where the** area, click the arrow for the second box, and click **less than**. Then in the third box, type **1**.
- 27. In the bottom area, click the **Bold** button, and change the **Font color** setting to red. Then click **OK**.

In the Conditional Formatting Rules Manager dialog box, the rule is listed in the Rule column with the formatting that will be applied to values that meet the rule's criteria in the Format column.

Conditional Formatting Rules Manager	? ×			
Show formatting rules for: UnitsInStock				
New Rule Z Edit Rule X Delete Rule -				
Rule (applied in order shown)	Format			
Value < 1	AaBbCcYyZz			
ОК	Cancel Apply			

Values that are less than 1 will be bold and red.

- **28.** Click **OK**. Then scroll down the report again, noticing that all the 0 values are now bold and red.
- **29.** Close the report, clicking **Yes** to save your changes to its design.

CLEAN UP Retain the GardenCompany05 database for use in the last exercise.

Previewing and Printing Reports

Using Print Preview to preview Access reports is very similar to using this view in other Microsoft Office 2010 programs. If you preview your reports carefully, you won't have any major surprises when you print them.

When previewing reports, you will want to pay special attention to how the pages break. In a grouped report, you can control whether group headings are allowed to appear at the bottom of a page with no data and whether groups are allowed to break across pages.

You can make changes to the setup of your report pages from the Page Setup contextual tab in Layout view or from the tab displayed when you switch to Print Preview. For example, you can specify the following:

- Paper size
- Margins
- Orientation
- Number of columns
- Whether Access should print the report's structural elements or only its data

You can also click the Page Setup button to display the Page Setup dialog box, where you can change all these settings in one place, as well as make additional refinements.

When you are ready to print, you click the Print button on the Print Preview tab of the ribbon to display the Print dialog box. You can also display the Print page of the Backstage view and then print one copy of the report with the default print settings by clicking the Quick Print button.

In this exercise, you'll preview a report, and you'll specify that groups should not break across pages. Then you'll explore the available page setup and printing options.



SET UP You need the GardenCompany05 database you worked with in the preceding exercise to complete this exercise. Open the GardenCompany05 database, and then follow the steps.

1. In the **Navigation** pane, right click the **Alphabetical List of Products** report, and then click **Print Preview.**

Only the Print Preview tab appears on the ribbon.

2. On the page navigation bar at the bottom of the window, click the **Next Page** button repeatedly to view each page of this report.

Because of the changes you made to the report in the previous exercise, the report is now six pages. Several of the groups start on one page and continue on the next page. For readability, let's fix this layout problem.

	Lown fortilizor	5 (5 1.	16
	Leaf blower	1 co.	13
	Loaf raka	1 co.	6
	Liles	é perpieg.	18
	Lily-of-the-field	One desen	3.4
	Lily-of-the-Valley	3 porpkg	4
	Long-handled shovel	1 co.	6
	Low volume agrinider	1 co.	6
M	Product Norme	Quantity Fer Unit	Units in Stock
	Magic Uly	One desen	40
	Magnifica Honeysue kie	1 co.	3
	Manuta fork	1 co.	0
	Martin house	1 co.	3
	Mole regellent	1 gt.	4
	Morrow Honeyauckie	1 co.	1
	Muriate of gotash	10 lb. bog	0
0	Product Norme	Quantity Fer Unit	Units in Stock
	Optional grass catcher	1 co.	0
	Organic composi	5 lb s.	7
	Organic fortilizor	5 (5 1)	26
	Os ell oting sprinkler	1 co.	10
	Oyster shells	5 lo b og	0
	Product Norme	Quantity Fer Unit	Units in Stock
	Pagyrus	1 co.	3
	Peo gravel	Peryard	1.5
	Peanuthul meal	5 lo b og	0
	Picial molta	5 lo b og	20
	Poot gots	1 tray/30 ca.	1.5

The group at the top of this page is a continuation of one that started on the previous page.

3. Switch to Layout view, and then on the **Design** tab, in the **Grouping & Totals** group, click the **Group & Sort** button.

The Group, Sort, And Total pane opens at the bottom of the report page.

Group, Sort, and Total				23
Group on ProductName 👻 with A on top 🔻 , More 🕨	4	⇒	\times	
Sort by ProductName Sort by ProductName I≣ Add a group 2↓ Add a sort				

You can use this pane to quickly add grouping and sorting levels and set related properties.

4. In the Group, Sort, and Total pane, in the Group on ProductName bar, click More.

.

[E Group & Sort

Access displays additional options.

G	roup, s	Sort, and Total		23
	G	iroup on ProductName 👻 with A on top 💌 , by first character 💌 , with no totals 💌 ,	- la	
		with title click to add , with a header section $ ar{ {\bf v}}$, without a footer section $ ar{ {\bf v}}$,		
		do not keep group together on one page 🔻 , Less ┥		
	C	Sort by ProductName		
		Sort by ProductName	_	

These are the current grouping settings.

- Click the do not keep group together on one page arrow, and in the list, click keep whole group together on one page. Then close the Group, Sort, and Total pane by clicking the Group & Sort button again.
- 6. Switch to Print Preview, and page through the report.

Now none of the groups is broken across pages. However, the report would look better with wider top, left, and right margins.

 On the Print Preview tab, in the Page Layout group, click the Page Setup button. The Page Setup dialog box opens.

Pag	je Setup			? ×		
P	rint Option:	Page	Columns			
l r	Margins (ir	nches) —		Sample		
	Top:	0.25		1 Contraction of the State of t		
	Bottom:	Bottom: 0.585		Consequences of the same		
	Left:	0.25		The same B provide the second		
	Right:	0.25		1 Die meine Standing und die Berner 2 Die soner De Sprenzen Statisticher 1 Die soner De Sprenzen Statisticher Productioner 1 Die soner gewennen (Die Sprenzen 1 Die soner gewennen) Hin soner 1 Die soner gewennen (Die soner Statisticher		
	Print Data Only					
	Split Form					
	Print Form Only					
	Print Datasheet Only					
	OK Cancel					

The Print Options page of the Page Setup dialog box.

🔲 Page Setup

- 8. Click the **Page** tab, and verify that the paper size is **Letter**.
- Return to the Print Options page, and change the Top, Left, and Right margins to 0.75. Then click OK.
- **10.** Scroll through the report to see the results.

Although all the data in the report fits on the page, the page number in the footer is set too far to the right and is producing extra pages.

- **11.** Switch to Layout view, scroll down to the bottom of the report, and then scroll to the right until you can see the page number.
- **12.** Click the page number control, and move and resize it so that it aligns approximately with the **Units In Stock** column heading.
- **13.** Switch to Print Preview, and page through the report.

The report now fits neatly on seven pages.

- **14.** If you want, print the report by using the same techniques you would use to print any database object.
- **15.** Close the report, clicking **Yes** to save your changes.

CLEAN UP Close the GardenCompany05 database.

Key Points

- When designing a report, consider the point you are trying to make, the intended audience, and the level of detail needed.
- You can create a report that displays only some of the fields in a table by using the Report wizard. The report can be sorted and grouped to summarize the data in a table in a meaningful way.
- You can refine a report in Layout view by manipulating its controls and setting its properties. You can also format the controls to structure and highlight data.
- In Print Preview, you can see how the report will look when printed and make adjustments before you print.