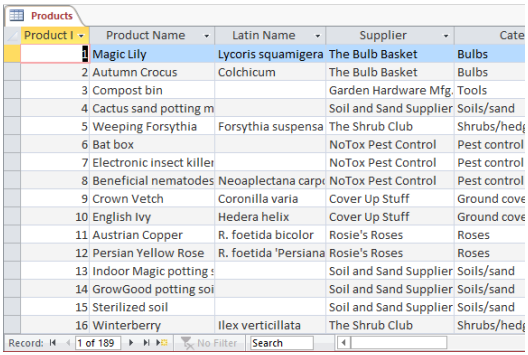
Chapter at a glance

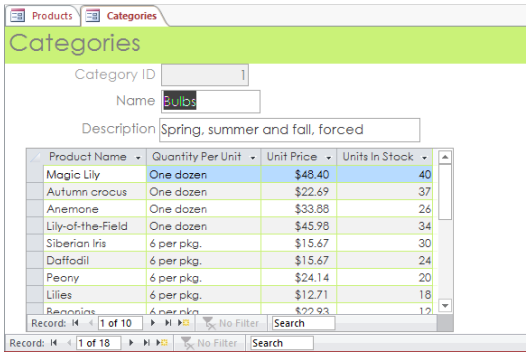
Tables

Explore tables,
page 28



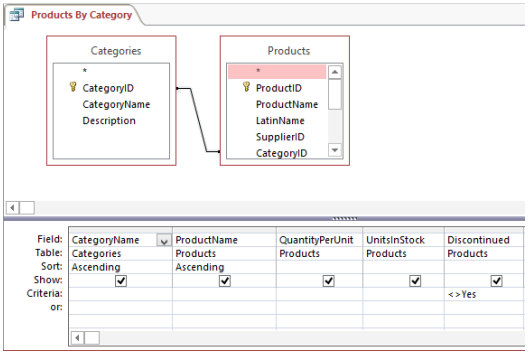
Forms

Explore forms,
page 33



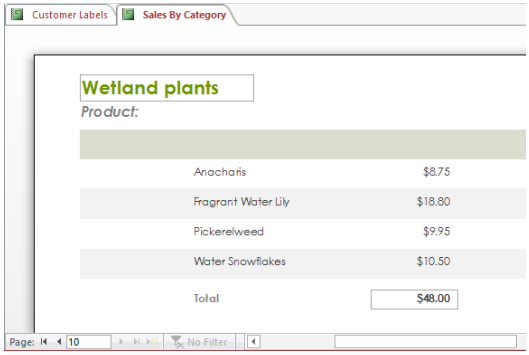
Queries

Explore queries,
page 38



Reports

Explore reports,
page 43



Explore Microsoft Access 2013

1

IN THIS CHAPTER, YOU WILL LEARN HOW TO

- Identify new features of Access 2013.
- Work in the Access 2013 user interface.
- Understand database concepts.
- Explore tables, forms, queries, and reports.
- Preview and print database objects.

This chapter introduces Microsoft Access 2013 and is designed to serve different purposes for different readers, depending on prior knowledge of this program and other Microsoft Office 2013 programs.

- If you are a beginning Access user, you might want to skip the lists of new features and start with "Working in the Access 2013 user interface."
- If you have used other Office 2007 or Office 2010 programs but have not worked with Access before, you might want to skip down to "Understanding database concepts."
- If you have upgraded to Access 2013 from Access 2003, you might want to read as far as the end of "Working in the Access 2013 user interface" and then skip to Chapter 2, "Create databases and simple tables."
- If you have upgraded to Access 2013 from Access 2007 or Access 2010, you might be interested in the new features that have been introduced in this version of the program, but you might not need to work through the exercises in the rest of this chapter.

Throughout this book, you'll be working with databases that contain information about the employees, products, suppliers, and customers of a fictional company. As you complete the exercises, you will develop an assortment of tables, forms, queries, and reports that can be used to enter, edit, and manipulate the information in a database in many ways.

In this chapter, you'll get an overview of the new features in recent versions of Access to help you identify changes if you're upgrading from a previous version. You'll explore the program's user interface, and the concepts and structure of data storage in Access. Then you'll look at database objects such as tables, forms, queries, and reports, while learning about Access features and functionality that you'll explore in more depth in later chapters. Finally, you'll preview and print database objects.

PRACTICE FILES To complete the exercises in this chapter, you need the practice file contained in the Chapter01 practice file folder. For more information, see "Download the practice files" in this book's Introduction.

Identifying new features of Access 2013

Access 2013 builds on previous versions to provide powerful tools for all your database needs. If you're upgrading to Access 2013 from a previous version, you're probably most interested in the differences between the old and new versions and how they will affect you, and you probably want to find out about them in the quickest possible way. The following sections list new features you will want to be aware of, depending on the version of Access you are upgrading from. Start with the first section and work down to your previous version to get the complete picture.

If you are upgrading from Access 2010

If you have been using Access 2010, you might be wondering how Microsoft could have improved on what seemed like a pretty comprehensive set of features and tools. The new features introduced between Access 2010 and Access 2013 include the following:

- **Access web apps** You can still create powerful database applications that are stored locally or in a central location. But if your organization is running Microsoft SharePoint with Access Services, you can now create a web form of a database that anyone with the correct permissions can view and manipulate from a web browser. Judging by the amount of effort Microsoft is putting into Access web apps, it is likely that this sophisticated evolution of the web capabilities introduced with Access 2010 will be the wave of the future, at least for larger enterprises.

- **Windows 8 functionality** Access 2013, like all Office 2013 programs, is a full-featured Windows 8 application. When it is running on the Windows 8 operating system, it not only has the sleek new Windows 8 look but it also incorporates the latest touch technologies designed for tablet and mobile devices.
- **Starting screen** Access opens to a screen that provides easy access to new database templates, the databases you recently worked on, and locations where existing databases might be stored.
- **Cloud access** When you connect your Office or Access installation to a Microsoft account (formerly known as a Windows Live account) or a Microsoft Office 365 account, you have the option of saving desktop databases "in the cloud" to a SharePoint document library or a Microsoft SkyDrive site, so that it is available when you are not at your desk.

If you are upgrading from Access 2007

In addition to the features listed in the previous section, if you're upgrading from Access 2007, you'll want to take note of the following features that were introduced in Access 2010:

- **The Backstage view** All the tools you need to work with your database files, as opposed to their content, are accessible from one location. You display the Backstage view by clicking the File tab, which replaces the Microsoft Office Button at the left end of the ribbon.
- **Customizable ribbon** Create your own tabs and groups to suit the way you work.
- **Unifying themes** Add pizzazz to database objects such as forms and reports by applying a professional-looking theme from a gallery of options.
- **Web databases** With Access 2010, companies with employees and clients in different geographic locations can make their databases accessible over the Internet in a web browser. (This technology is still available in Access 2013, but it has been superseded by Access web apps. An Access 2010 web database cannot be converted to an Access web app.)
- **Navigation forms** Offering the sophisticated browsing techniques people are accustomed to using on websites, these forms provide an essential navigation tool that can increase the usability and data security of any database.

- **New database templates** Creating common types of databases is easier when you start with a template. The database templates that come with Access are supplemented by those made available by a community of database developers through the Office website.
- **Application parts** Add predefined database objects to an existing database. In addition to various types of forms, several Quick Start parts are available. For example, adding the Contacts part adds one table and associated queries, forms, and reports.
- **Enhanced Layout view and layout controls** It is easy to make design changes in Layout view while viewing the underlying data.
- **Enhanced Expression Builder** The layout of the Expression Builder dialog box has been refined to make building an expression more intuitive. In addition, a feature called IntelliSense has been incorporated to display options based on what you enter and to provide syntax guidance.
- **Improved conditional formatting** You can use data bars to add at-a-glance insight into the data in Number fields.
- **Ability to export to PDF and XPS files** When you want to make a report or other database object available to people but don't want them to be able to manipulate it, export the object in either PDF or XPS format. You can optimize the file size for printing or publishing online.

If you are upgrading from Access 2003

In addition to the features listed in the previous sections, if you're upgrading from Access 2003, you'll want to take note of the following features that were introduced in Access 2007:

- **The ribbon** The user interface organizes the most common commands for any database object into tabs and groups so that the appropriate commands are immediately accessible for the current object.
- **Quick Access Toolbar** Customize a portion of the toolbar to include commands you regularly use, regardless of which object is currently active.
- **Navigation pane** The customizable Navigation pane replaces the Database window from Access 2003. Display or hide all tables, queries, forms, reports, macros, and modules, or create a custom group that displays only the objects you want to work with at the moment. You can even hide the Navigation pane to make more room on the screen for your database object.

- **View Shortcuts toolbar** This context-sensitive toolbar in the lower-right corner of the program window provides single-click switching among the supported views of the current database object.
- **Tabbed documents** Open multiple database objects and switch between them quickly by clicking tabs on a tab bar.
- **Template library** Quickly locate and download professionally designed templates for common database projects.
- **Improved sorting and filtering** Easily sort all records in a table based on one or more fields, or filter a table or form to display or hide records matching multiple criteria.
- **Layout view** Redesign a form or report while viewing it.
- **Stacked and Tabular layouts** Group controls in a form or report layout so that you can easily manipulate the entire group as one unit.
- **Automatic calendar** The Date/Time data type includes an optional calendar control. Click the calendar, and select the date you want.
- **Rich Text** Memo fields support most common formatting options, including fonts, color, and character formatting. The formatting is stored with the database.
- **Create tab** Quickly create a new table, form, query, report, macro, SharePoint list, or other Access object.
- **Totals function** Add a totals row to a query, and select from a list of formulas to automatically calculate aggregate values for forms and reports.
- **Field List** Drag and drop fields from one or more related or unrelated tables onto your active table.
- **Attachment data type** Attach photos and other files to a database record.
- **Embedded macros** Macros embedded in a form or report offer a higher level of security in database applications.
- **Microsoft Access Help** Easily search end-user and developer help content from within Access.

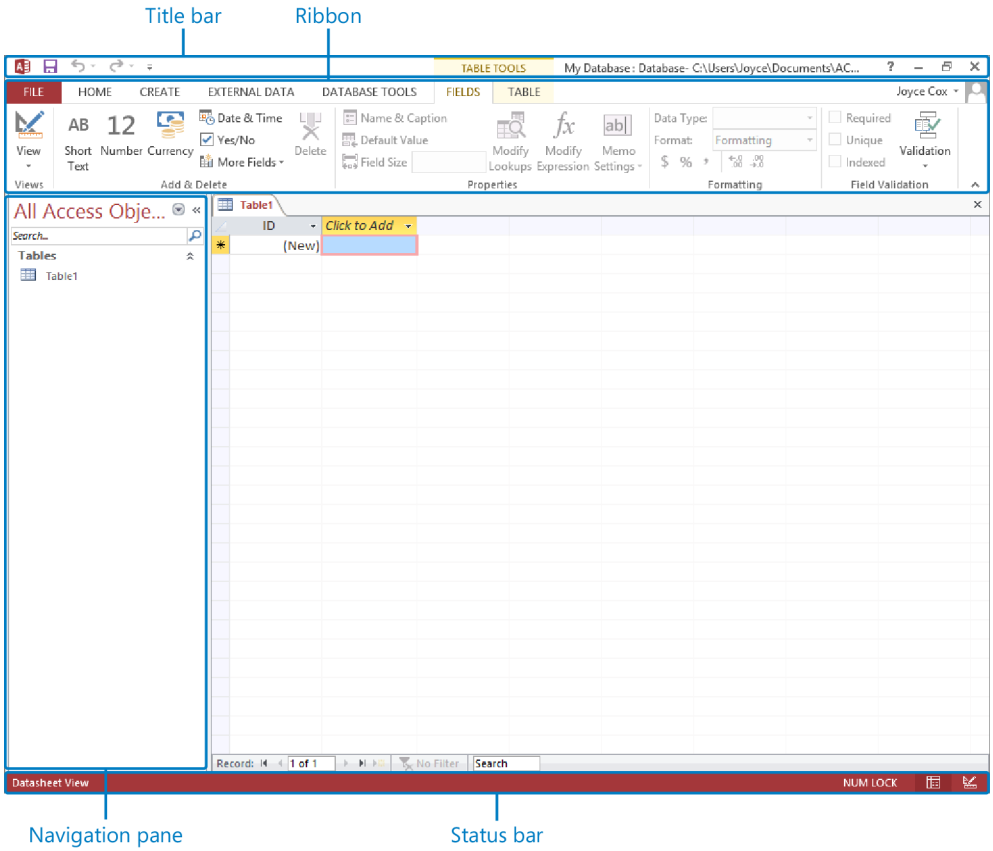
- **Improved information sharing** Easily import and export data between Access and other Office applications or .xml, .html, and .pdf files; create or link a database with a SharePoint list; or publish your database to a SharePoint library and allow users to update and extract information.
- **Improved report design** Quickly create a professional-looking report, complete with logo, header, and footer; and use Report view, combined with filters, to browse only selected records in the report.
- **Group, Sort, and Total pane** This feature makes it much easier to group and sort data in reports, and add totals from a drop-down list.
- **Enhanced security** Adding password protection to a database causes Access to automatically encrypt the database when it closes, and decrypt it when it opens.

Working in the Access 2013 user interface

The program we work with and depict in images throughout this book is a desktop installation of Access 2013, installed from a DVD as part of the Office 2013 suite of programs. You might have installed Access 2013 as a freestanding program or as part of an Office 365 subscription that allows users to install the desktop programs from the Internet. Regardless of how you installed Access, the program has the same functionality and works the same way.

TIP Office 365 is a cloud-based solution that small, midsize, and enterprise businesses can use to provide a variety of products and services to their employees through a subscription licensing program.

As with all programs in Office 2013, the most common way to start Access is from the Start screen (Windows 8) or the Start menu (Windows 7) displayed when you click at the left end of the Windows Taskbar. When you start Access without opening a database, the program's starting screen appears. From this screen, you can create a new database or open an existing one. Either way, the database is displayed in a program window that contains all the tools you need to create database objects and enter and manipulate data. The Access 2013 interface is designed to closely reflect the way people generally work with a database. If you are not familiar with this interface, which was first introduced with Access 2007, here is a quick description of the program window elements.

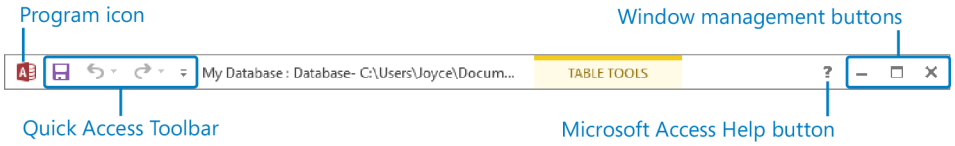


A new blank table displayed in the Access 2013 program window.

Identifying program window elements

The program window contains the following elements:

- **Title bar** This bar across the top of the program window displays the name of the active database and by default display the path to the folder where it is stored. It also provides tools for managing the program and the program window.



You can use the tools on the title bar to move and size the window, undo or redo changes, save the database, and get help with the program.

At the left end of the title bar is the program icon, which you click to display commands to restore, move, size, minimize, maximize, and close the program window.

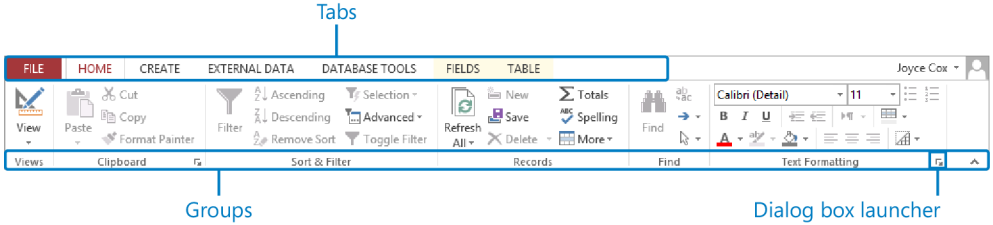
To the right of the Access icon is the Quick Access Toolbar. By default, the Quick Access Toolbar displays the Save, Undo, and Redo buttons, but you can customize it to display any command you want.

TIP You might find that you work more efficiently if you organize the commands you use frequently on the Quick Access Toolbar and then display it below the ribbon, directly above the workspace. For information, see "Manipulating the Quick Access Toolbar" in Chapter 13, "Work in Access more efficiently."

At the right end of the title bar are four buttons: a Help button that opens the Access Help window, in which you can use standard techniques to find information; and the familiar Minimize, Maximize/Restore Down, and Close buttons.

SEE ALSO For information about the Access Help system, see the sidebar "Getting help with Access 2013" later in this chapter.

- **Ribbon** Below the title bar, all the commands for working with an Access database are represented as buttons in this central location so that you can work efficiently with the program.



Each tab of the ribbon contains a specific category of commands.

TIP If your ribbon appears as a row of tabs across the top of the workspace, click the Home tab to temporarily display that tab's buttons so that you can follow along. We tell you how to control the display of the ribbon in a minute. Don't be alarmed if your ribbon looks different from those shown in our screens. You might have installed programs that add their own tabs to the ribbon, or your screen settings might be different. For more information, see "Working with the ribbon" later in this topic.

Across the top of the ribbon is a set of tabs. Clicking a tab displays its associated set of commands.

Commands related to managing Access and Access databases (rather than their content) are gathered together in the Backstage view, which you display by clicking the colored File tab located at the left end of the ribbon. Commands available in the Backstage view are organized on pages, which you display by clicking the page tabs in the colored left pane. You redisplay the database and the ribbon by clicking the Back arrow located above the page tabs.

The Backstage view, where you can manage files and customize the program.

Commands related to working with database content are represented as buttons on the remaining tabs of the ribbon. When an object is selected in a database, one or more tool tabs might appear at the right end of the ribbon to make commands related to that specific object easily accessible. Tool tabs disappear again when their associated object is no longer active or when the current view does not support their use.

TIP Some older commands no longer appear as buttons on the ribbon but are still available in the program. You can make these commands available by adding them to the Quick Access Toolbar. For more information, see "Manipulating the Quick Access Toolbar" in Chapter 13, "Work in Access more efficiently."

On each tab, buttons representing commands are organized into named groups. You can point to any button to display a ScreenTip with the command name and its keyboard shortcut (if it has one).

SEE ALSO For information about controlling the display and content of ScreenTips, see "Changing default program options" in Chapter 13, "Work in Access more efficiently."

Some buttons include an integrated or separate arrow. If a button and its arrow are integrated, clicking the button displays options for refining the action of the button. If the button and its arrow are separate, clicking the button carries out the default action indicated by the button's current icon. You can change the default action by clicking the arrow and then clicking the action you want.

Related but less common commands are not represented as buttons in a group. Instead, they're available in a dialog box or pane, which you display by clicking the dialog box launcher located in the lower-right corner of the group.

To the right of the ribbon group names is the Collapse The Ribbon button. Clicking this button hides the groups of commands but leaves the tab names visible. You can then click any tab name to temporarily display its commands. Clicking anywhere other than the ribbon hides the commands again. When the full ribbon is temporarily visible, you can click the Pin The Ribbon button (the pushpin) to the right of the group names to make the display permanent.

KEYBOARD SHORTCUT Press Ctrl+F1 to minimize or expand the ribbon. For a list of keyboard shortcuts, see "Keyboard shortcuts" at the end of this book.

- **Navigation pane** On the left side of the program window, the Navigation pane displays lists of database objects. By default, it displays all the objects in the database by type of object, but you can filter the list by clicking the pane's title bar and then clicking the category or group of objects you want to display. You can collapse and expand the groups in the list by clicking the chevrons in the section bars. If the

Navigation pane is in your way, you can click the Shutter Bar Open/Close button in its upper-right corner to minimize it. To redisplay the Navigation pane, click the Shutter Bar Open/Close button again. You can drag the right border of the pane to the left or right to make it wider or narrower.

KEYBOARD SHORTCUT Press F11 to display or hide the Navigation pane.

- **Status bar** Across the bottom of the program window, this bar displays information about the current database and provides access to certain program functions. At the right end of the bar is the View Shortcuts toolbar, which provides convenient buttons for switching the view of the active database object.

This status bar tells you the current view and the status of the keyboard.

The goal of all these user interface features is to make working in a database as intuitive as possible. Commands for tasks you perform often are readily available, and even those you might use infrequently are easy to find.

Working with the ribbon

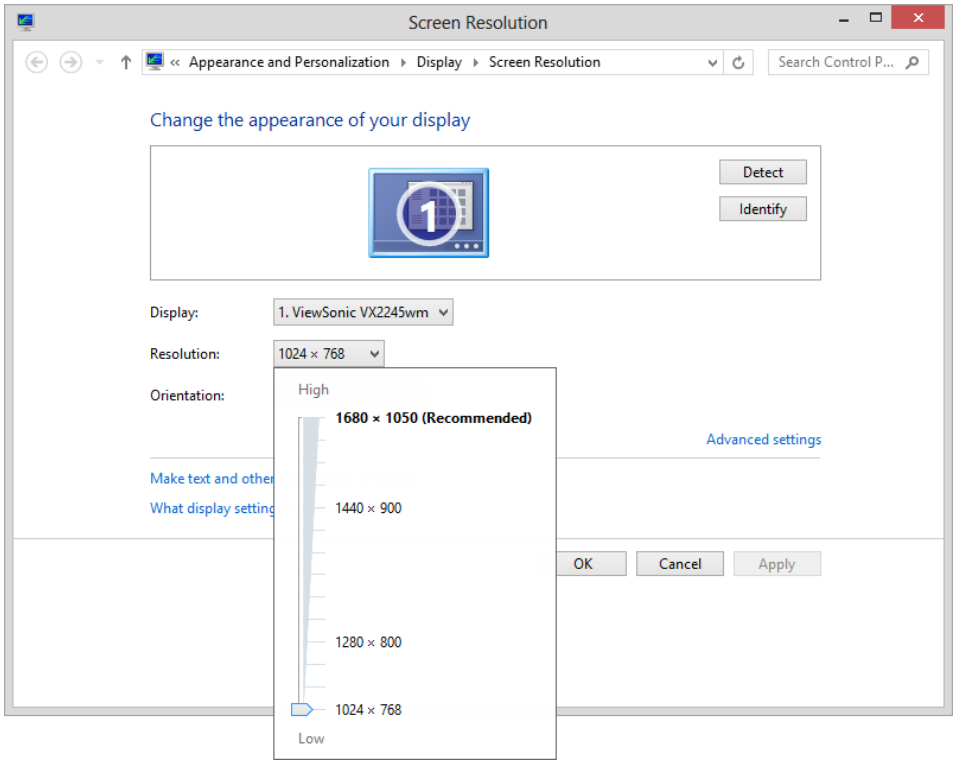
As with all Office 2013 programs, the Access ribbon is dynamic, meaning that as its width changes, its buttons adapt to the available space. As a result, a button might be large or small, it might or might not have a label, or it might even be an entry in a list.

The width of the ribbon depends on the following three factors:

- **Program window width** Maximizing the program window provides the most space for the ribbon.
- **Screen resolution** Screen resolution is the size of your screen display expressed as pixels wide × pixels high. The greater the screen resolution, the greater the amount of information that will fit on one screen. Your screen resolution options are dependent on your graphics adapter and monitor. Common screen resolutions range from 800 × 600 to 2560 × 1600. The greater the number of pixels wide (the first number), the greater the number of buttons that can be shown on the ribbon.

To change your screen resolution:

1. Open the **Screen Resolution** control panel item by using one of the following methods:
   - Right-click the Windows desktop, and then click **Screen Resolution**.
   - Click a blank area at the top of the Windows 8 **Start** screen, and enter **screen resolution**. Then in the **Search** pane, click **Settings**, and in the **Settings** results, click **Adjust screen resolution**.
   - In Control Panel, open the **Display** control panel item, and then click **Adjust Resolution**. (If Control Panel is set to **Category** view, click **Adjust screen resolution** in the **Appearance and Personalization** category.)
2. On the **Screen Resolution** page, click the **Resolution** arrow, click or drag to select the screen resolution you want, and then click **Apply** or **OK**.

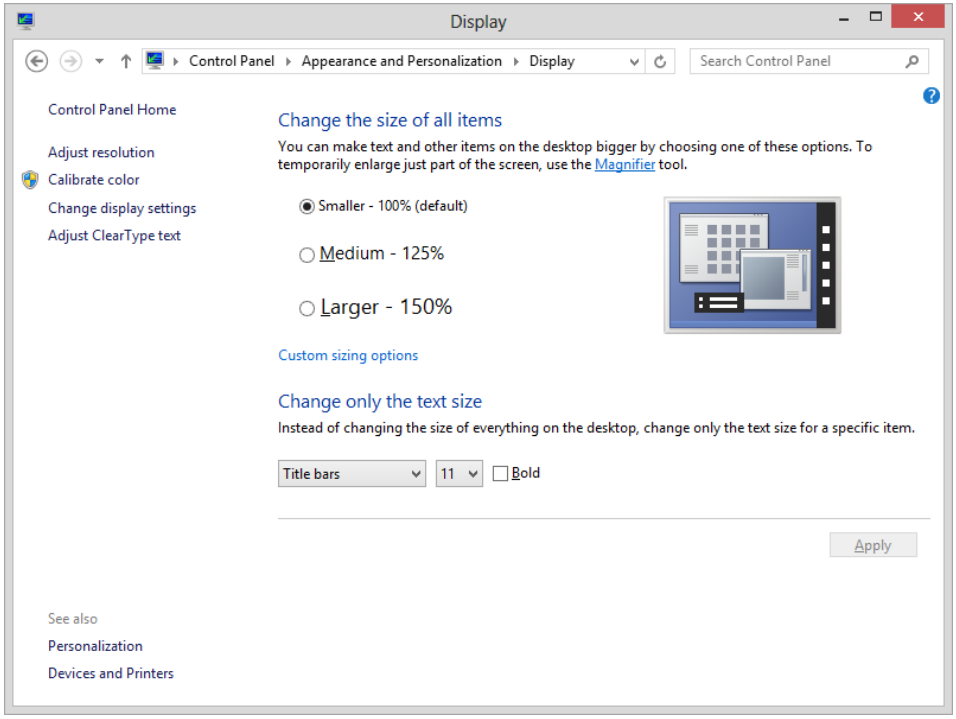


On the Screen Resolution page, you set the resolution by dragging the pointer on the slider.

- **The magnification of your screen display** If you change the screen magnification setting in Windows, text and user interface elements are larger and therefore more legible, but fewer elements fit on the screen. You can set the magnification from 100 to 500 percent.

  You can change the screen magnification from the Display control panel item, which you can open from Control Panel or by using one of the following methods:

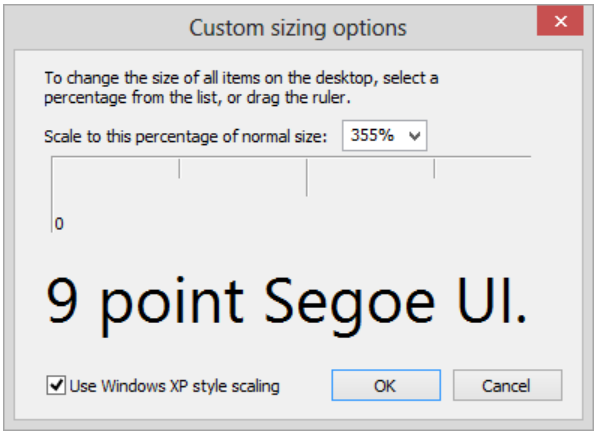
  - Right-click the Windows desktop, click **Personalize**, and then in the lower-left corner of the **Personalization** page, click **Display**.
  - Enter **display** at the top of the Windows 8 **Start** screen, click **Settings**, and then click **Display** in the **Settings** results.



On the Display page, you can choose one of the standard magnification options or change the text size of specific elements.

To change the screen magnification to 125 or 150 percent, click that option on the Display page.

To select another magnification, click the Custom Sizing Options link and then, in the Custom Sizing Options dialog box, click the magnification you want in the drop-down list or drag the ruler to change the magnification even more.



You can set the magnification as high as 500 percent by dragging the ruler in the Custom Sizing Options dialog box.

After you click OK in the Custom Sizing Options dialog box, the custom magnification is shown on the Display page along with any warnings about possible problems with selecting that magnification. Click Apply on the Display page to apply the selected magnification.

Adapting exercise steps

The screen shots shown in this book were captured at a screen resolution of 1024 x 768, at 100-percent magnification. If your settings are different, the ribbon on your screen might not look the same as the one shown in this book. As a result, exercise instructions that involve the ribbon might require a little adaptation.

Our instructions use this format:

- On the **Home** tab, in the **Sort & Filter** group, click the **Ascending** button.

If the command is in a list, our instructions use this format:

- On the **Home** tab, in the **Records** group, click the **More** button and then, in the list, click **Hide Fields**.

If differences between your display settings and ours cause a button to appear differently on your screen than it does in this book, you can easily adapt the steps to locate the command. First click the specified tab, and then locate the specified group. If a group has been collapsed into a group list or under a group button, click the list or button to display the group's commands. If you can't immediately identify the button you want, point to likely candidates to display their names in ScreenTips.

In this book, we provide instructions based on the traditional keyboard and mouse input methods. If you're using Access on a touch-enabled device, you might be giving commands by tapping with your finger or with a stylus. If so, substitute a tapping action any time we instruct you to click a user interface element. Also note that when we tell you to enter information in Access, you can do so by typing on a keyboard, tapping an on-screen keyboard, or even speaking aloud, depending on your computer setup and your personal preferences.

In this exercise, you'll start Access and explore the Backstage view and ribbon.

SET UP **You need the GardenCompany01 database located in the Chapter01 practice file folder to complete this exercise, but don't open it yet. Just follow the steps.**

1 From the **Start** screen (Windows 8) or the **Start** menu (Windows 7), start **Access 2013**.

2 On the Access starting page, at the bottom of the left pane, click **Open Other Files** to display the **Open** page of the **Backstage** view.

TIP From the Backstage view, you manage your Access database files, but you don't work with the content of databases. For example, you can create a database, but not a database object. We'll talk about the tasks you can perform in the Backstage view in other chapters of this book.

3 In the left pane of the **Open** page, click **Computer**, and in the right pane, click the **Browse** button. Then in the **Open** dialog box, navigate to the **Chapter01** practice file folder, and double-click **GardenCompany01** to open the database.

4 If a security warning appears, click **Enable Content** in the security warning bar.

TIP Be sure to read the sidebar "Enabling macros and other active content" later in this chapter to learn about Access security options.

Let's save the database so that you can explore it without fear of overwriting the original practice file.

5 Click the **File** tab to display the **Backstage** view, and click **Save As**. Then with **Save Database As** selected in the left pane of the **Save As** page and **Access Database** selected in the **Database File Types** area of the right pane, click the **Save As** button.

6 In the **Save As** dialog box, save the database with a different name, such as **MyGardenCompany01**.

TIP In this book, we assume you will save files in the practice file folders, but you can save them wherever you want. When we refer to the practice file folders in the instructions, simply substitute the save location you chose.

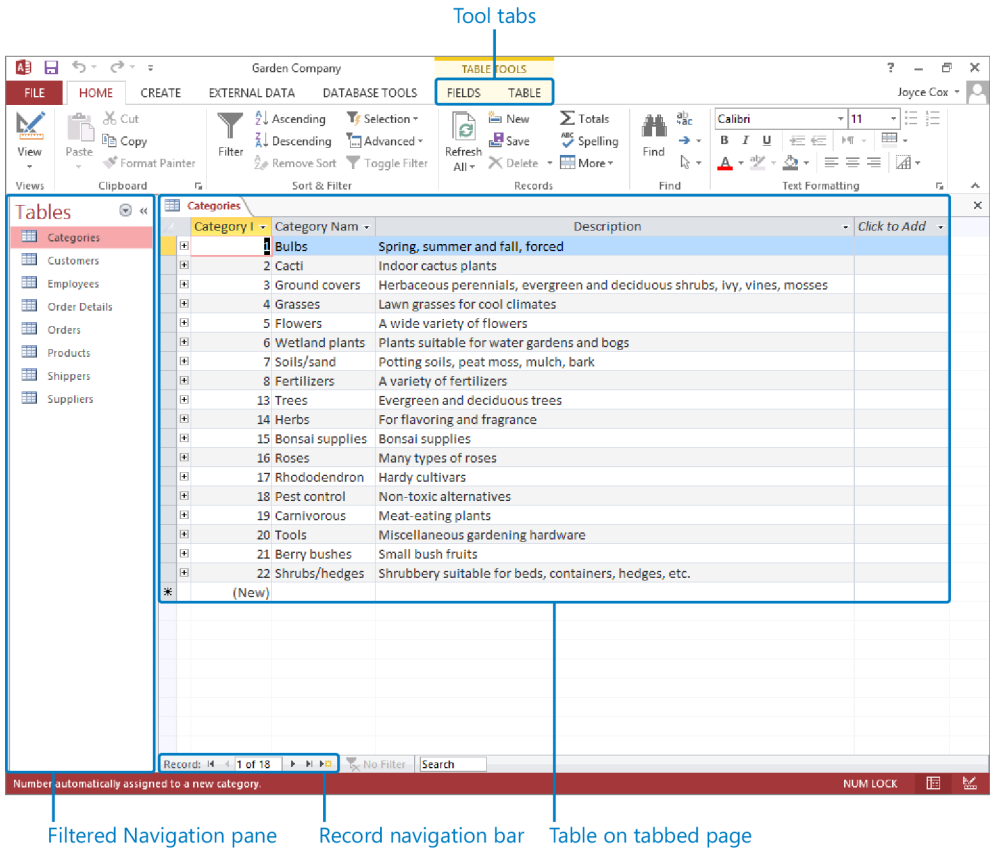
7 Click **Enable Content** in the security warning bar.

On the left, the Navigation pane displays a list of all the objects in this database. Spanning the top of the window, the ribbon includes five tabs: File, Home, Create, External Data, and Database Tools. Because no database object is currently open, the Home tab is active by default, but none of its buttons are available.

TIP Databases created in Access 2013 use the file storage format introduced with Access 2007, and their files have the .accdb extension. You can open database files created in earlier versions of Access (which have an .mdb extension) in Access 2013. You can then either work with and save them in the old format or work with and save them in the new format. If you convert them, you can no longer open them in versions prior to Access 2007. For more information about the ACCDB format, search for *accdb* in Access Help.

8 In the **Navigation** pane title bar, click **All Access Objects**, and then in the **Filter By Group** area of the menu, click **Tables** to list only the tables in the **Navigation** pane.

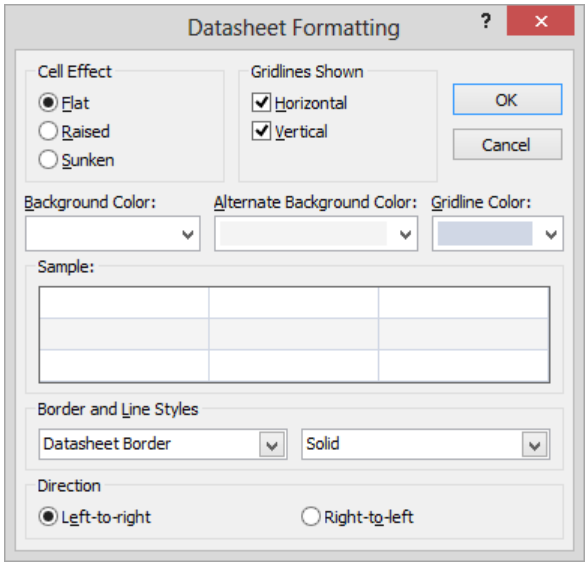
9 In the **Navigation** pane, double-click **Categories** to open that table on a tabbed page. Notice that the record navigation bar at the bottom of the page tells you how many records the table contains and which one is active, and enables you to move among records. Notice also that the **Fields** and **Table** tool tabs appear on the ribbon. These tool tabs are displayed only when you are working with a table.



Buttons representing commands related to working with database content are organized on the Home tab in six groups: Views, Clipboard, Sort & Filter, Records, Find, and Text Formatting.

TIP By default, Access 2013 displays database objects on tabbed pages. If you want, you can display each object in a separate window instead. In the Access Options dialog box, display the Current Database page, and then in the Application Options area, below Document Window Options, click Overlapping Windows. The window of each object has its own set of Minimize, Restore Down/Maximize, and Close buttons. You can move object windows by dragging their title bars, you can size them by dragging their frames, and you can arrange them by clicking the Switch Windows button in the Window group and selecting an option. (This group is added to the Home tab when you select Overlapping Windows in the Access Options dialog box.)

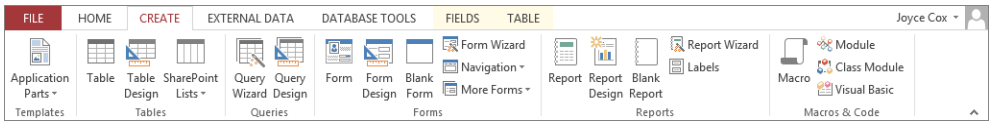
10 On the **Home** tab, click the **Text Formatting** dialog box launcher to open the **Datasheet Formatting** dialog box.



From the Datasheet Formatting dialog box, you can access settings not available as buttons in the Text Formatting group, such as Gridline Color and Border And Line Styles.

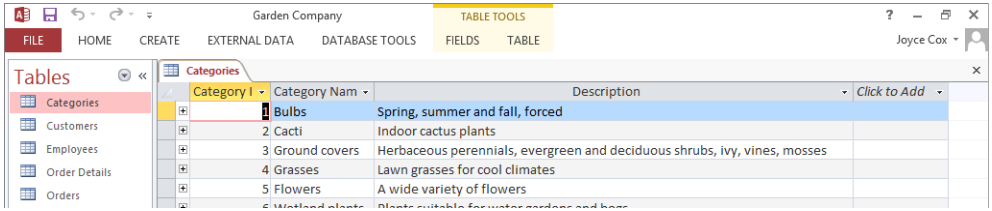
11 Close the **Datasheet Formatting** dialog box.

12 Click the **Create** tab.



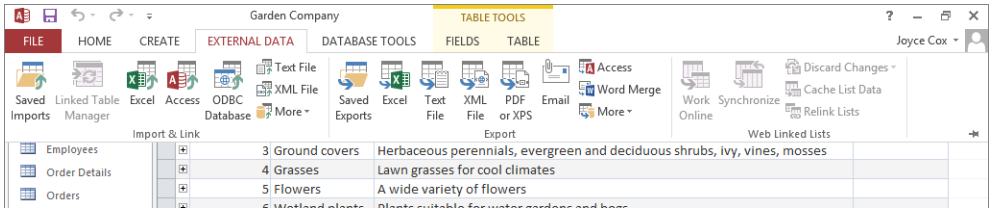
Buttons representing commands related to creating database objects are organized on the Create tab in six groups: Templates, Tables, Queries, Forms, Reports, and Macros & Code.

13 Double-click the **Create** tab.



Double-clicking the active tab hides the ribbon's button groups and provides more space for the current database object.

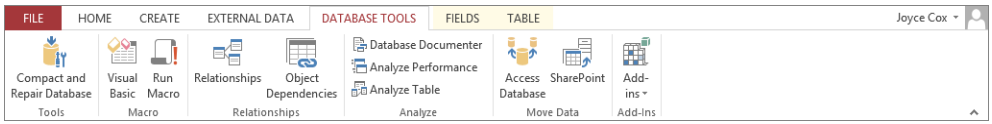
14 Click the **External Data** tab to temporarily display the full ribbon, which drops down over the table.



Buttons representing commands related to moving information between a database and other sources are organized on the External Data tab in three groups: Import & Link, Export, and Web Linked Lists.

15 Click anywhere in the open table, and notice that the ribbon disappears again.

16 Double-click the **Database Tools** tab to permanently display the ribbon and activate that tab.



Buttons representing commands related to managing, analyzing, and ensuring data reliability are organized on the Database Tools tab in six groups: Tools, Macro, Relationships, Analyze, Move Data, and Add-Ins.

Before we finish this exercise, let's close first the active database object and then the database. (If you want to close the database and exit Access, click the Close button in the upper-right corner of the program window.)

17 At the right end of the bar where the page tab for the **Categories** table is displayed, click the **Close** button to close the table without closing the database.

18 Display the **Backstage** view, and then click **Close** to close the database without exiting Access.

TIP If you don't close the active database before opening another one, Access prompts you to save your changes and closes the active database for you. You cannot have two databases open simultaneously in a single instance of Access. If you want to have two databases open at the same time, you must start a new instance of Access.

CLEAN UP **Retain your version of the GardenCompany01 database for use in later exercises.**

Getting help with Access 2013

Whenever you have a question about Access 2013 that is not answered by this book, your next recourse is the Access Help system. This system is a combination of tools and information available from the Office website for reference when you are online, and basic information stored on your computer for reference when you are offline. Online references can include articles, videos, and training tools.

To open the Access Help window and search for information:

1. Near the right end of the title bar, click the **Microsoft Access Help** button to open the **Access Help** window.

   KEYBOARD SHORTCUT Press F1 to display the Access Help window.

   TIP To switch between online and offline reference content, click the arrow to the right of Access Help and then click Access Help From Office.com or Access Help From Your Computer. You can print the information shown in the Help window by clicking the Print button on the toolbar. You can change the font size of the topic by clicking the Use Large Text button on the toolbar to the left of the Search Help box.

2. In the search box, enter your search term, and then click the **Search** button (the magnifying glass) to display a list of related topics.
3. In the results list, click the topic you're interested in to display its information.
4. Jump to related information by clicking any hyperlink identified by blue text.

   TIP When section links appear at the beginning of an article, you can click a link to move directly to that section of the article. You can click the Top Of Page link at the end of an article to return to the beginning.

5. When you finish exploring, close the **Access Help** window by clicking the **Close** button in the upper-right corner.

Understanding database concepts

Simple databases store information in only one table. These simple databases are often called *flat file databases*, or just *flat databases*. More complex database programs, such as Access, store information in multiple related tables, thereby creating what are referred to as *relational databases*. If the information in a relational database is organized correctly, you can treat these multiple tables as a single storage area and pull information electronically from different tables in whatever order meets your needs.

Tables are one of the types of database objects you work with in Access. Other types include forms, queries, reports, macros, and modules. Of these object types, only tables are used to store information. The others are used to enter, manage, manipulate, analyze, retrieve, or display the information stored in tables—in other words, to make the information as accessible and therefore as useful as possible.

In its most basic form, a database is the electronic equivalent of an organized list of information. Typically, this information has a common subject or purpose, such as the list of employees shown in the following table.

ID	First name	Last name	Title	Hire date
1	Karen	Berg	Owner	May 1, 2008
2	Kim	Akers	Head Buyer	June 1, 2008
3	Tom	O'Neill	Assistant	November 2, 2008
4	Naoki	Sato	Sales Manager	August 14, 2009
5	Molly	Dempsey	Gardener	October 17, 2009
6	Nancy	Anderson	Sales Rep	May 1, 2010
7	Michael	Entin	Sales Rep	April 1, 2011
8	Kari	Furse	Buyer	May 3, 2011
9	Chase	Carpenter	Gardener	November 15, 2012

This list is arranged in a table of columns and rows.

- Each column represents a *field*—a specific type of information about an employee: last name, first name, hire date, and so on.
- Each row represents a *record*—all the information about a specific employee.

If a database did nothing more than store information in a table, it would be no more useful than a paper list. But because the database stores information in an electronic format, you can manipulate the information in powerful ways to extend its usefulness.

For example, suppose you want to find someone's phone number. You can look up this information in a phone book, because its information is organized for this purpose. However, if you want to find the phone number of your grandmother's neighbor, a printed phone book won't do you much good, because it isn't organized in a way that makes that information easy to find.

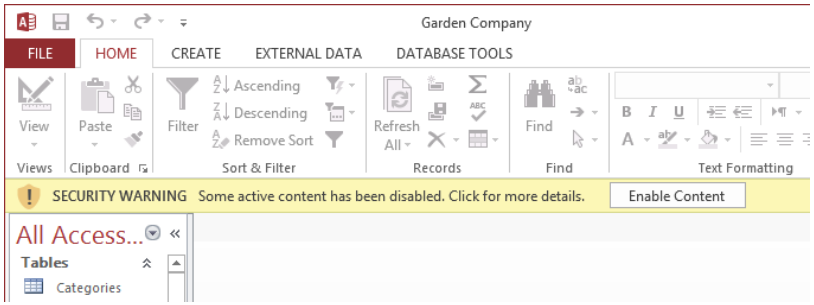
Storing the information published in a phone book in a database, has the following advantages:

- It takes up far less space.
- It costs less to reproduce and distribute.
- If the database is designed correctly, the information can be retrieved in many ways.

The real power of a database isn't in its ability to store information; it is in your ability to quickly retrieve exactly the information you want from the database.

Enabling macros and other active content

Some databases contain macros and other active content that can run code on your computer. In most cases, the code is there to perform a database-related task, but hackers can also use macros to spread a virus to your computer. When you open a database that is not stored in a trusted location or signed by a trusted publisher, Access displays a security warning below the ribbon.



While the security warning is displayed, the active content in the database is disabled.

You can enable macros and other active content in three ways:

- By enabling the macros for use in the current database session.
- By adding the database publisher to the list of trusted publishers. This option is available only if the publisher's digital signature is attached to the database. Access will then automatically enable macro content in any database that is also signed by that publisher.
- By making the location of the database a trusted location, or moving the database to a trusted location. Access automatically enables macro content in any database saved in that location.

To enable macros for the current database session only:

- In the security warning bar, click **Enable Content**.

To add the publisher of a digitally signed database to the Trusted Publishers list:

1. In the security warning bar, click **Some active content has been disabled**.
2. On the **Info** page of the **Backstage** view, click the **Enable Content** button, and then click **Advanced Options**.

3 In the **Microsoft Office Security Options** dialog box, click **Trust all documents from this publisher**, and then click **OK**.

To add the location of a database to the Trusted Locations list:

1 Display the **Backstage** view, and then click **Options**.
2 In the left pane of the **Access Options** dialog box, click **Trust Center**, and then click **Trust Center Settings**.
3 In the left pane of the **Trust Center** dialog box, click **Trusted Locations**.
4 On the **Trusted Locations** page, click **Add new location**.
5 In the **Microsoft Office Trusted Location** dialog box, click **Browse**.
6 In the **Browse** dialog box, navigate to the folder containing the current database, and then click **OK**.
7 In the **Microsoft Office Trusted Location** dialog box, select the **Subfolders of this location are also trusted** check box if appropriate, and then click **OK** in each of the open dialog boxes.

If you prefer, you can change the way Access handles macros in all databases:

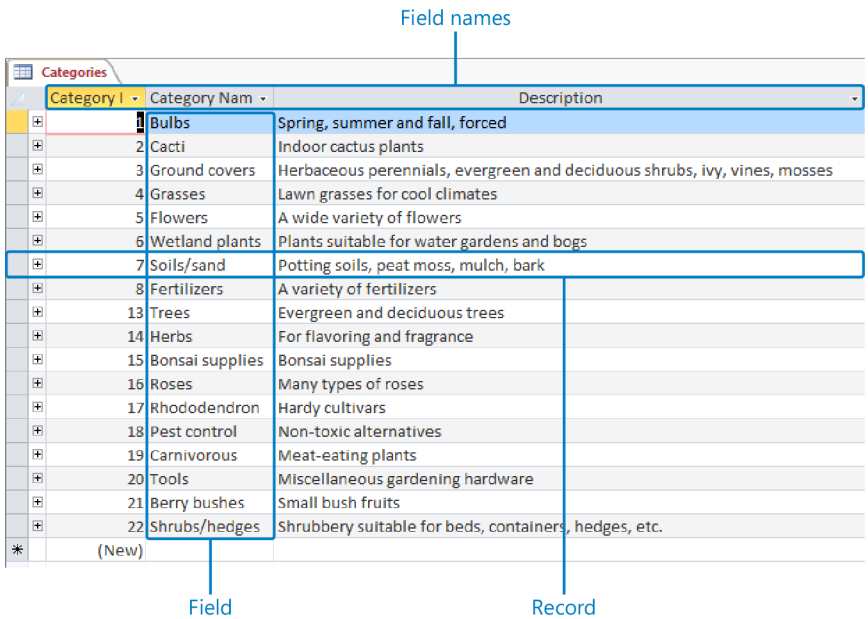
1 Display the **Trust Center**, and then in the left pane, click **Macro Settings**.
2 Select the option for the way you want Access to handle macros:
   - **Disable all macros without notification** If a database contains macros, Access disables them and doesn't display the security warning to give you the option of enabling them.
   - **Disable all macros with notification** Access disables all macros and displays the security warning.
   - **Disable all macros except digitally signed macros** Access automatically enables digitally signed macros.
   - **Enable all macros** Access enables all macros (not recommended).
3 Click **OK** to close the **Trust Center**, and then click **OK** to close the **Access Options** dialog box.

Exploring tables

Tables are the core database objects. Their purpose is to store information. The purpose of every other database object is to interact in some manner with one or more tables. An Access database can contain thousands of tables, and the number of records each table can contain is limited more by the storage space available than by anything else.

Every Access object has two or more views. For tables, the two most common views are Datasheet view, in which you can display and modify the table's data, and Design view, in which you can display and modify the table's structure. To open a table in Datasheet view, either double-click its name in the Navigation pane, or right-click its name and then click Open. To open a table in Design view, right-click its name and then click Design View. When a table is open in Datasheet view, clicking the View button in the Views group on the Home tab switches to Design view; when it is open in Design view, clicking the button switches to Datasheet view. You can also switch the view by clicking one of the buttons on the View Shortcuts toolbar in the lower-right corner of the program window.

Datasheet view displays the table's data in columns (*fields*) and rows (*records*). The first row contains column headings (*field names*).



In this format, the table is often simply referred to as a datasheet.

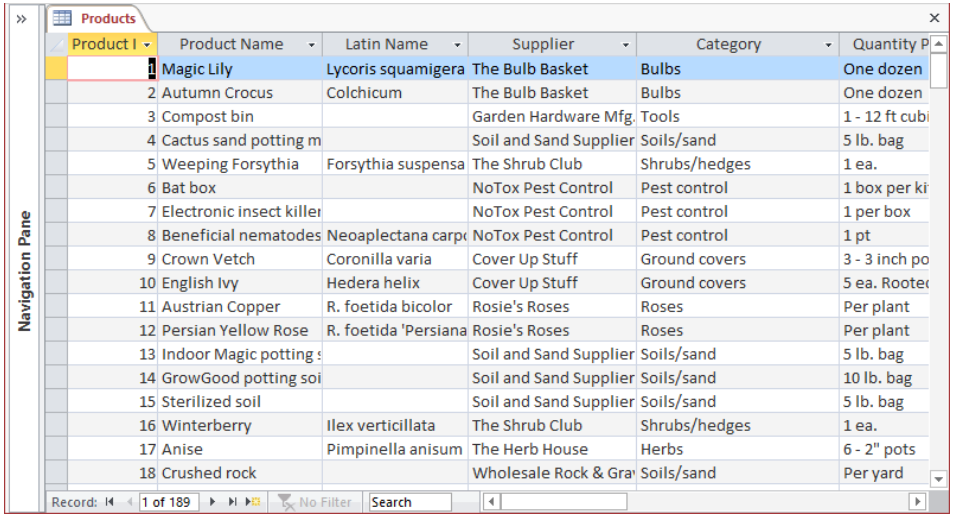
If two tables have one or more field names in common, you can embed the datasheet from one table in another. By using an embedded datasheet, called a *subdatasheet*, you can display the information in more than one table at the same time. For example, you might want to embed an Orders datasheet in a Customers table so that the orders each customer has placed are visible in the context of the customer record.

In this exercise, you'll open existing database tables and explore the table structure in two views.

SET UP **You need the GardenCompany01 database you worked with in the preceding exercise to complete this exercise. (For practice purposes, you might have saved this database with a different name.) Open the database, ensure that tables are listed in the Navigation pane, and then follow the steps.**

1 In the **Navigation** pane, double-click **Products** to open the **Products** table in **Datasheet** view.

2 At the right end of the **Navigation** pane title bar, click the **Shutter Bar Close** button to display more of the table's fields.



Each row in this table contains information about a product and each column contains one field from each record. The record navigation bar shows that the selected record is 1 of 189.

TIP To make the graphics in this book readable, from now on we will often work in a program window that is smaller than full screen with the Navigation pane closed. More fields and records might be visible in your tables than those shown in our screen shots.

Let's adjust the width of a couple of columns to accommodate their longest entries.

3 In the row of field names at the top of the table, point to the right border of the **Product Name** column, and when the pointer changes to a double-headed arrow, double-click the border.

4 Double-click the right border of the **Category** column to adjust that field's width. Notice that the products **Magic Lily** and **Autumn Crocus** are assigned to the **Bulbs** category.

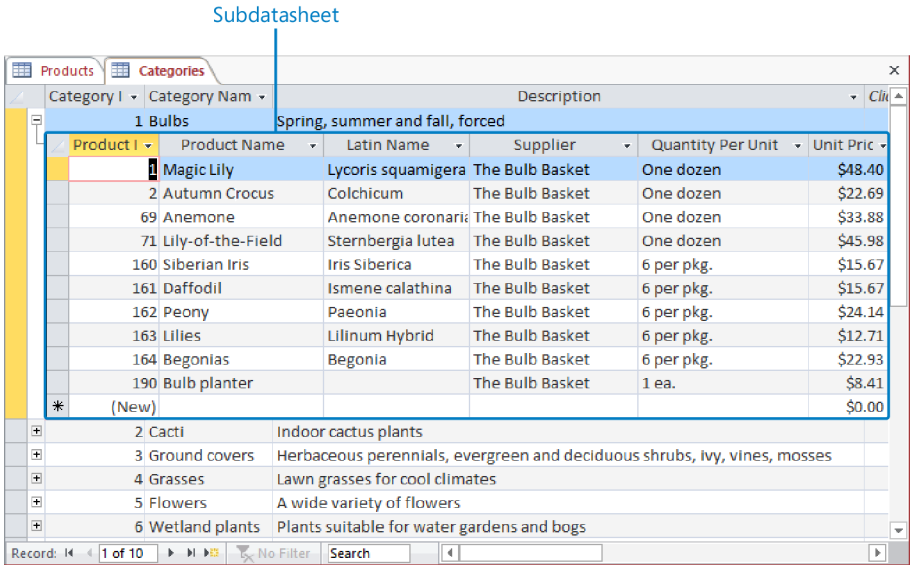
TIP You can also resize a table column by pointing to the border and dragging it to the left or right.

Now let's open a second table.

5 In the **Navigation** pane, click the **Shutter Bar Open** button, and then double-click **Categories** to open the **Categories** table on a new tabbed page in **Datasheet** view. Notice that the **Products** table is still open and available if you need it.

TIP From now on, open the Navigation pane whenever you need to work with a different object, but feel free to close it if you want to display more of the data.

6 In the **Categories** table, at the left end of the record for the **Bulbs** category, click the **Expand** button (the plus sign) to display a subdatasheet containing all the records from the **Products** table that are assigned to the **Bulbs** category.



You can display records from two related tables simultaneously.

TIP Displaying a subdatasheet is only possible if a relationship has been established between two tables. For information about relationships, see "Defining relationships between tables" in Chapter 2, "Create databases and simple tables."

7 To the left of the record for the **Bulbs** category, click the **Collapse** button (the minus sign) to hide the subdatasheet.

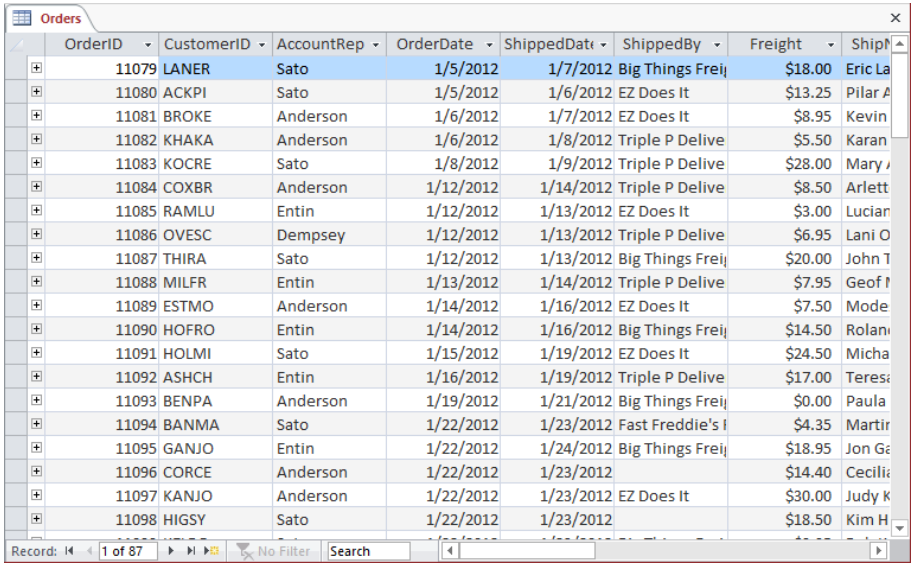
8 Click the **Close** button at the right end of the page tab bar (not the **Close** button in the upper-right corner of the program window) to close the **Categories** table.

9 Close the **Products** table, and when Access asks whether you want to save your changes to this table, click **Yes**.

TIP In steps 3 and 4, you changed the look of the table by changing the widths of columns. If you want those changes to be in effect the next time you open the table, you must save them.

Next let's use a table containing order-fulfillment information to practice moving among records.

10 In the **Navigation** pane, double-click the **Orders** table.



The record navigation bar at the bottom of the window indicates that this table contains 87 records, and that the active record is number 1 of 87.

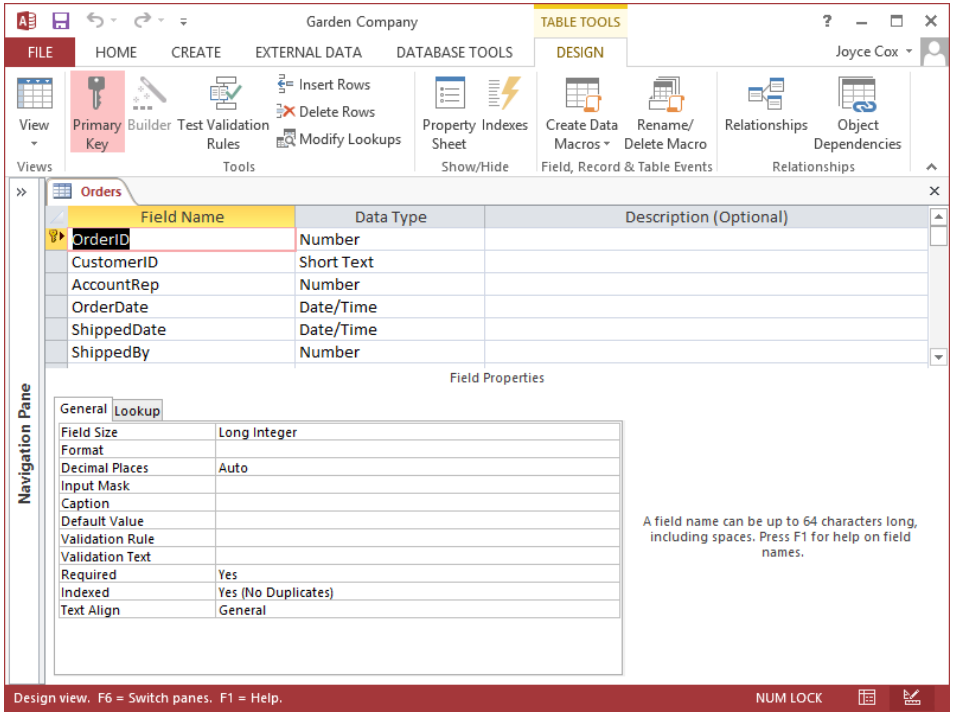
11 On the record navigation bar, click the **Next record** button several times to move the selection down the active **OrderID** field.

KEYBOARD SHORTCUT Press the Up Arrow or Down Arrow key to move the selection one record at a time. Press the Page Up or Page Down key to move one screen at a time. Press Ctrl+Home or Ctrl+End to move the selection to the first or last field in the table.

12 Click the record navigation bar, select the current record number, enter **40**, and then press the **Enter** key to move the selection directly to record **40 of 87**.

Finally, let's view the structure of the open table.

13 On the **View Shortcuts** toolbar, click the **Design View** button to display the **Orders** table structure in **Design** view. Notice that the **Design** tool tab now appears on the ribbon.



Datasheet view displays the data stored in the table, whereas Design view displays the underlying table structure.

SEE ALSO For information about table structure, see "Refining table structure" in Chapter 2, "Create databases and simple tables."

CLEAN UP **Close the Orders table. Keep the GardenCompany01 database open for use in later exercises.**

Exploring forms

Access tables are dense lists of raw information. Working directly with tables in a database you have created might be quite simple for you, but it might be overwhelming for people who don't know much about databases in general or about this database in particular. To make it easier to enter, display, and print information, you can design forms.

A form acts as a friendly interface for a table. Through a form, you can display and edit the records of the underlying table, or create new records. Most forms provide an interface to only one table. However, by embedding subforms within a main form, you can use one form to interact with multiple tables that are related through one or more common fields.

Forms are essentially collections of controls that either accept information or display information. You can create forms by using a wizard, or you can create them from scratch by manually selecting and placing the controls. Access provides the types of controls that are standard in Windows dialog boxes, such as labels, text boxes, option buttons, and check boxes. With a little ingenuity, you can create forms that look and work much like the dialog boxes in all Windows programs.

As with tables, you can display forms in several views. The following are the three most common views:

- **Form** In this view, you can display and enter data.
- **Layout** In this view, you can work with the elements of the form to refine its appearance and functionality while also displaying the data from the underlying table.
- **Design** In this view, you have more precise control over the appearance, placement, and functionality of form elements, but you cannot display the underlying data.

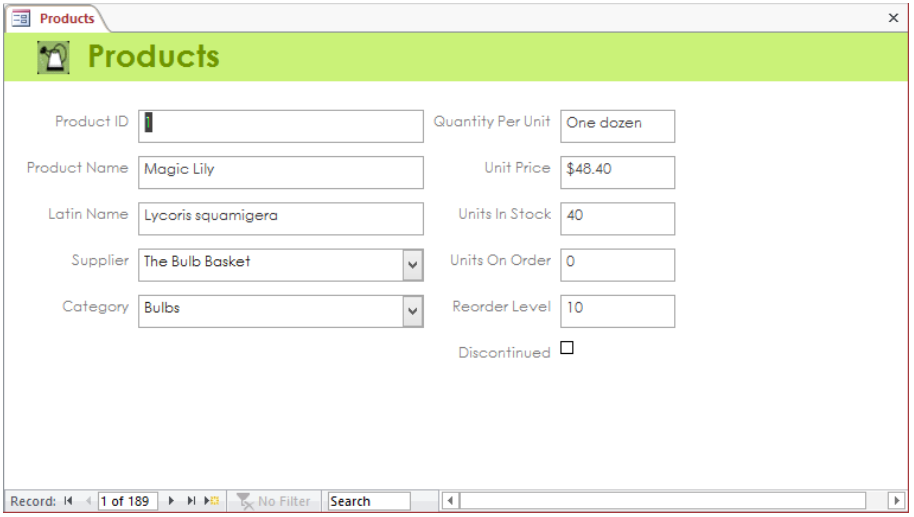
SEE ALSO For more information about forms, see Chapter 3, "Create simple forms," and Chapter 8, "Create custom forms."

In this exercise, you'll explore forms, subforms, and the available form controls.

SET UP **You need the GardenCompany01 database you worked with in the preceding exercise to complete this exercise. If necessary, open the database, and then follow the steps.**

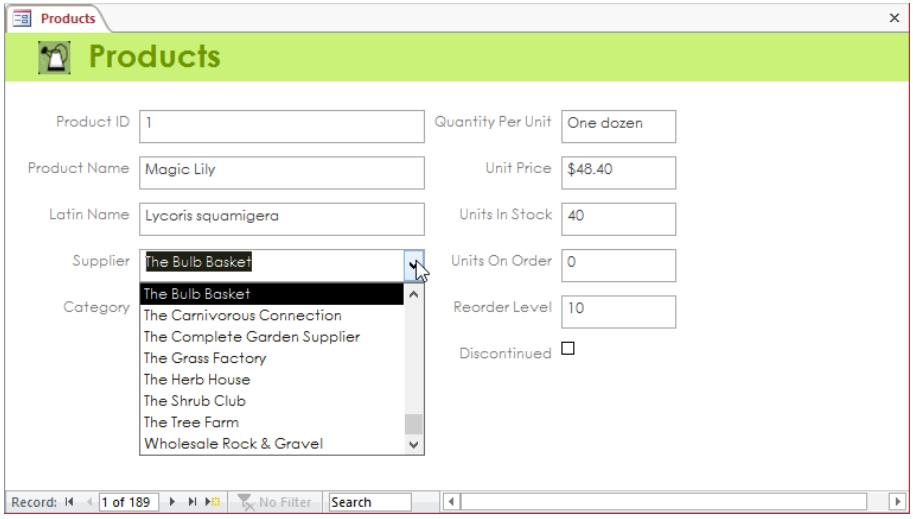
1 In the **Navigation** pane, click the title bar to display the category list, and then in the **Filter By Group** area, click **Forms** to display all the forms that have been saved as part of this database.

2 In the **Navigation** pane, double-click **Products** to open the **Products** form on a tabbed page.



This form is the interface for the Products table.

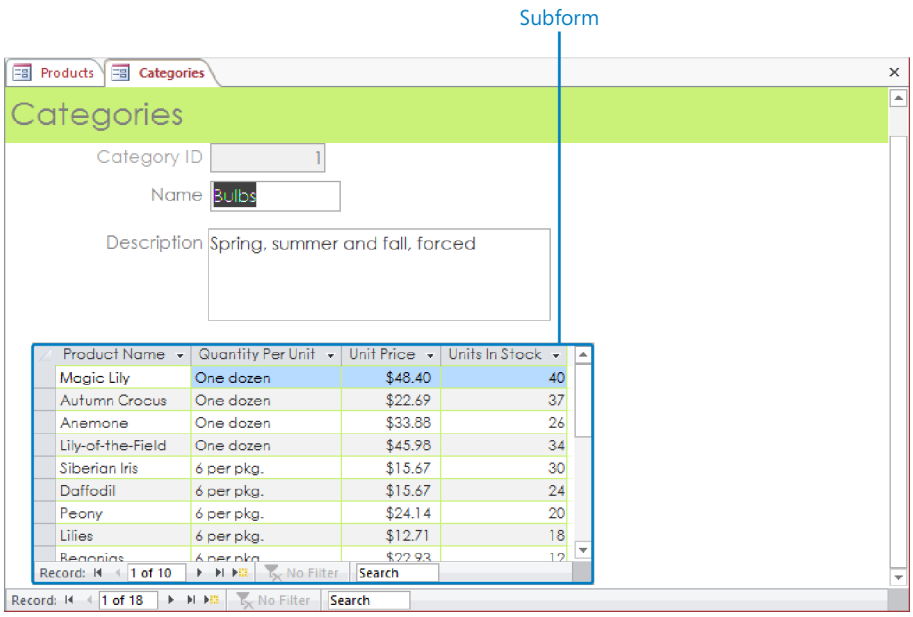
3 Click the arrow adjacent to the **Supplier** box to display a list of all the company's suppliers.



This is an example of a list box control.

Now let's open a form that includes a main form and a subform.

4 In the **Navigation** pane, double-click **Categories** to open that form on its own tabbed page. Notice that the main form displays information from the **Categories** table, and the subform, which looks like a datasheet, displays information from the **Products** table for the current record.

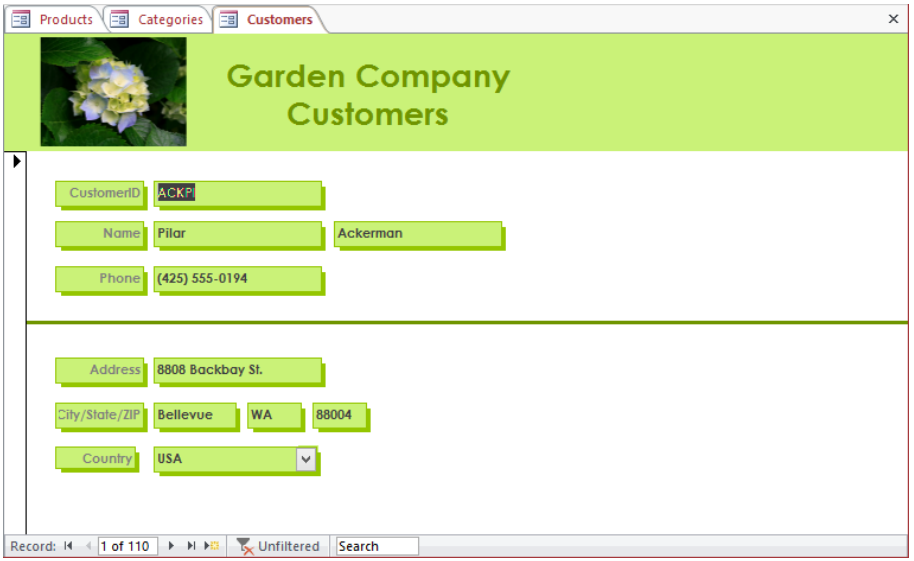


This form is the interface for both the Categories and Products tables.

5 On the main form's record navigation bar, click the **Next Record** button a few times to display the next few records. Notice that the subform changes with each click to display the products in each category.

Next let's display a form containing customer information in various views.

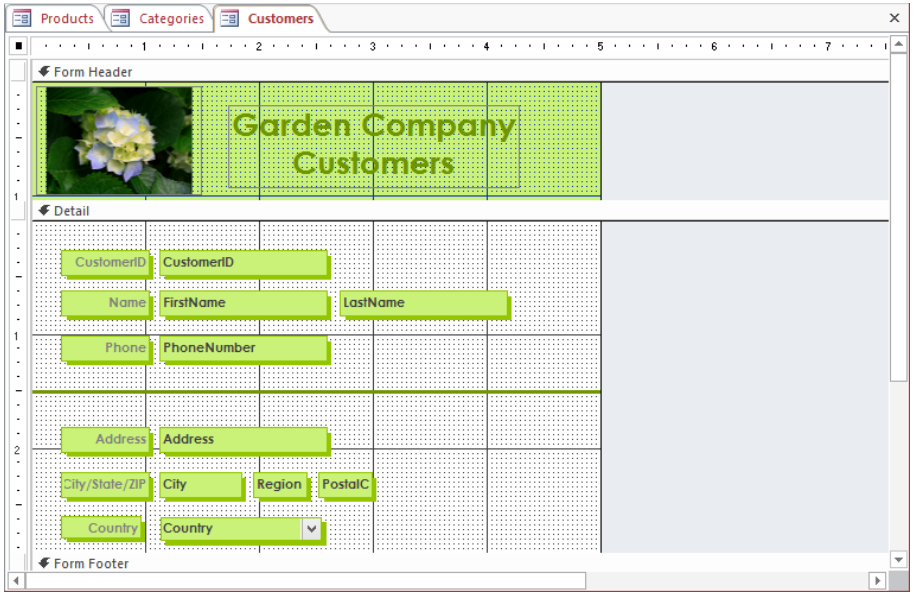
6 In the **Navigation** pane, double-click **Customers** to open that form in **Form** view.



The purpose of this form is to edit or create customer records.

7 On the **Home** tab, in the **Views** group, click the **View** button, which switches between **Form** view and **Layout** view. Notice that three tool tabs (**Design**, **Arrange**, and **Format**) appear on the ribbon.

8 In the **Views** group, click the **View** arrow, and then click **Design View** to display the underlying structure of the form.



In Design view, you can add controls to a form, rearrange controls, format the controls and the form itself, and add pictures and lines to help identify the form and its sections.

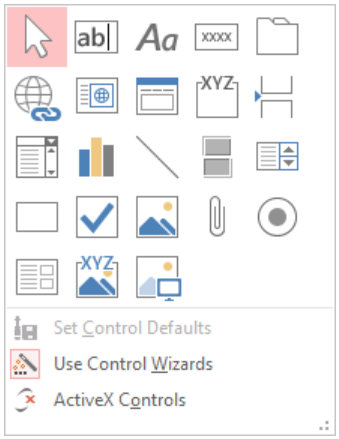
9 Switch between **Form** view, **Layout** view, and **Design** view, noticing the similarities and differences.

Finally, let's take a look at the controls available for designing forms.

10 On the **Design** tool tab, in the **Controls** group, do one of the following, depending on the size of your program window:

- In the lower-right corner of the **Controls** gallery, click the **More** button.
- Click the **Controls** button.

Either method displays a menu containing the **Controls** gallery.



You can use these controls to assemble custom forms for your database.

SEE ALSO For information about form controls, see "Adding controls" in Chapter 8, "Create custom forms."

11 Click away from the gallery to close it.

12 Close all the open database objects by right-clicking the tab of the **Customers** form and then clicking **Close All**.

CLEAN UP **Keep the GardenCompany01 database open for use in later exercises.**

Exploring queries

You can locate specific information stored in a table, or in multiple tables, by creating a query that specifies the criteria you want to match. Queries can be quite simple—for example, you might want a list of all products in a specific category that cost less than $10.00. They can also be quite complex—for example, you might want to locate all out-of-state customers who have purchased gloves within the last three months. For the first example, you might be able to sort and filter the data in the Products table fairly quickly to come up with a list. For the second example, sorting and filtering would be very tedious. It would be far simpler to create a query that extracts all records in the Customers table whose billing addresses are not in your state and whose customer IDs map to records that appear in the Orders table within the last three months and whose item IDs map to records classified as gloves in the Products table.

You can create queries by using a Query wizard, and you can also create them from scratch. The most common type is the select query, which extracts matching records from one or more tables. Less common are queries that perform specific types of actions.

Processing a query, commonly referred to as *running a query* or *querying the database*, displays a datasheet containing only the records that match your search criteria. You can use the query results as the basis for further analysis, create other database objects (such as reports) from the results, or export the results in another format, such as an Excel spreadsheet.

If you create a query that you are likely to want to run more than once, you can save it. It then becomes part of the database and appears in the list when you display the Queries group in the Navigation pane. To run the query at any time, you simply double-click it in the Navigation pane. Each time you run the query, Access evaluates the records in the specified table or tables and displays in Datasheet view the current subset of records that match the criteria defined in the query.

To set up a query, you work in Design view. Switching to this view displays the Query Designer, which has two components:

- The top pane displays boxes listing the fields of the tables the query is designed to work with. Each box represents one table. In a query that works with more than one table, lines between the boxes indicate that before the query was created, relationships were established between the tables based on common fields. The relationships enable the query to draw information from the tables.

  SEE ALSO For more information about relationships, see "Defining relationships between tables" in Chapter 2, "Create databases and simple tables."

- The bottom pane displays the design grid, where the query's search criteria are defined. Each column of the grid refers to one field from one of the tables in the top pane. Each row defines a different aspect of the query.

Don't worry if this all sounds a bit complicated at the moment. When you approach queries logically, they soon begin to make perfect sense.

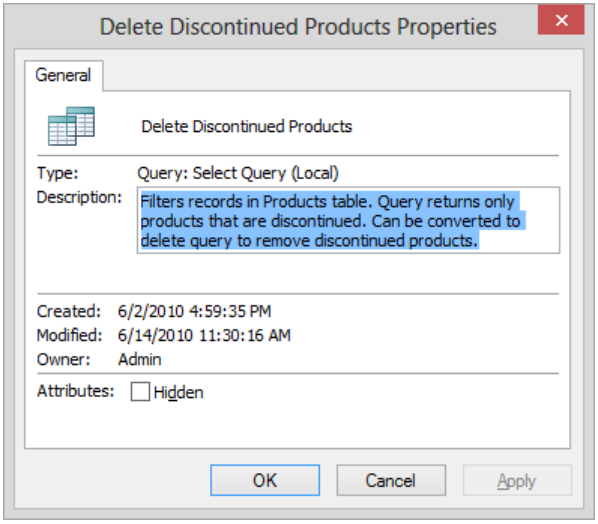
SEE ALSO For more information about queries, see Chapter 7, "Create queries."

In this exercise, you'll explore two existing queries.

SET UP **You need the GardenCompany01 database you worked with in the preceding exercise to complete this exercise. If necessary, open the database, and then follow the steps.**

1 In the **Navigation** pane, display the **Queries** group, which includes all the queries that have been saved as part of this database.

2 In the **Navigation** pane, right-click the **Delete Discontinued Products** query, and then click **Object Properties** to display the properties of the query, including a description of its purpose.

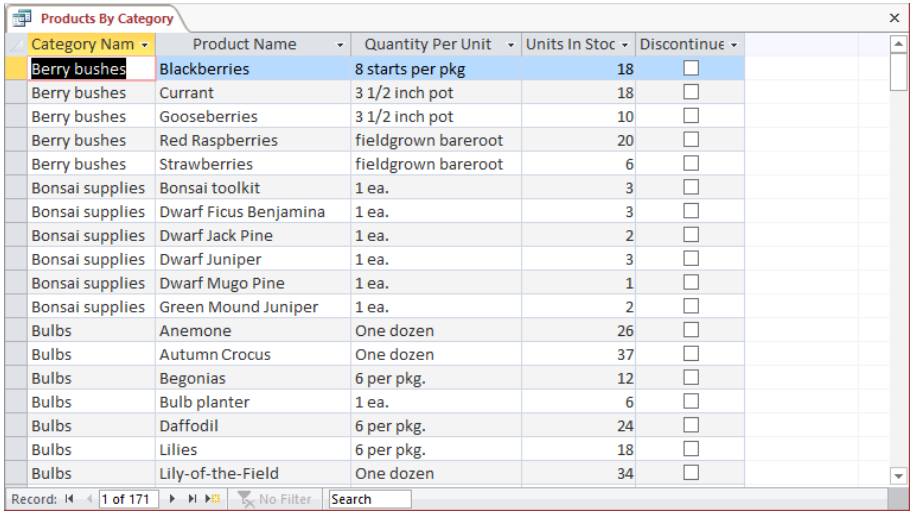


The icon at the top of the General tab indicates that this is a select query.

3 In the **Delete Discontinued Products Properties** dialog box, click **Cancel**.

Let's run a query.

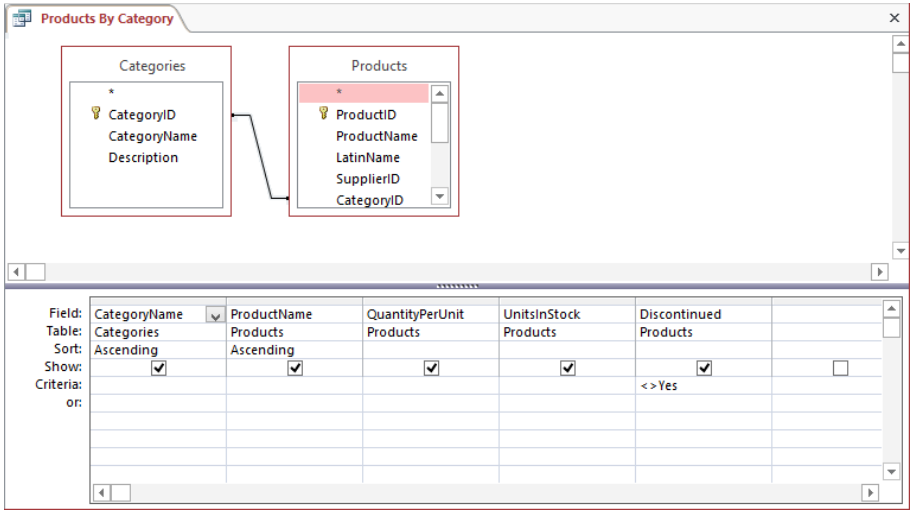
4 Right-click the **Products By Category** query, and then click **Open** to run the query and display its results in a datasheet. If necessary, close the **Navigation** pane so that you can see all the results.



The record navigation bar indicates that 171 records meet the criteria of the Products By Category query.

The Products table contains 189 records. To find out why 18 of the records are missing in the query results, let's look at this query in Design view.

5 On the **View Shortcuts** toolbar, click the **Design View** button to display the query in the Query Designer.



You use the Query Designer to indicate the tables you want to use and the criteria you want to match.

The two boxes in the top pane of the Query Designer list the fields in the Categories and Products tables. The line between the boxes indicates a relationship based on their common CategoryID field. The design grid in the bottom pane defines a query that matches information from both tables. Because <> Yes (not equal to Yes) is entered in the Criteria row for the Discontinued field, this query finds all the records that don't have a value of Yes in that field (in other words, all the records that have not been discontinued) and displays them by category.

As an experiment, let's make a small change to the query design.

6 In the **Criteria** row of the **Discontinued** field, replace <> with **=**. Then on the **Design** tool tab, in the **Results** group, click the **Run** button to find all the records that have been discontinued.

Products By Category

Category Nam	Product Name	Quantity Per Unit	Units In Stoc	Discontinue
Bonsai supplies	Bonsai mixed garden	1 ea.	0	☑
Bonsai supplies	Bonsai scissors	1 ea.	0	☑
Fertilizers	Guano	5 lb. bag	0	☑
Fertilizers	Muriate of potash	10 lb. bag	0	☑
Grasses	Decorator moss	1 tray	0	☑
Shrubs/hedges	Hedge shears 10"	1 ea.	0	☑
Soils/sand	Buckwheat hulls	5 lb bag	0	☑
Soils/sand	Oyster shells	5 lb bag	0	☑
Soils/sand	Peanut hull meal	5 lb bag	0	☑
Soils/sand	Terrarium soil	5 lb bag	0	☑
Tools	Manure fork	1 ea.	0	☑
Tools	Optional grass catcher	1 ea.	0	☑
Tools	Posthole digger	1 ea.	0	☑
Tools	Push reel lawn mower	1 ea.	0	☑
Tools	Revolving sprinkler	1 ea.	0	☑
Tools	Root waterer	1 ea.	0	☑
Tools	Shade fencing 6'	50' roll	0	☑
Tools	Sharpening kit	1 ea.	0	☑

Record: 1 of 18 No Filter Search

The 18 discontinued products account for the difference between the number of records in the Products table and the number of records displayed by the original query.

TIP You can also run a query by switching to Datasheet view.

7 Close the **Products By Category** query. When a message asks whether you want to save your changes to the query, click **No**.

CLEAN UP **Keep the GardenCompany01 database open for use in later exercises.**

Exploring reports

You can display the information recorded in your tables in nicely formatted, easily accessible reports, either on your computer screen or on paper. A report can include items of information selected from multiple tables and queries, values calculated from information in the database, and formatting elements such as headers, footers, titles, and headings.

You can look at reports in four views:

- **Report view** In this view, you can scroll through the information in the report without being distracted by the page breaks that will be inserted when it is printed.
- **Print Preview** In this view, Access displays your report exactly as it will look when printed.
- **Layout view** This view displays the data in the report (similar to Print Preview) but enables you to edit the layout.
- **Design view** In this view, you can manipulate the design of a report in the same way that you manipulate a form.

SEE ALSO For more information about reports, see Chapter 5, "Create simple reports," and Chapter 9, "Create custom reports."

In this exercise, you'll preview a report as it will appear when printed. You'll also examine another report in Design view.

SET UP **You need the GardenCompany01 database you worked with in the preceding exercise to complete this exercise. If necessary, open the database, and then follow the steps.**

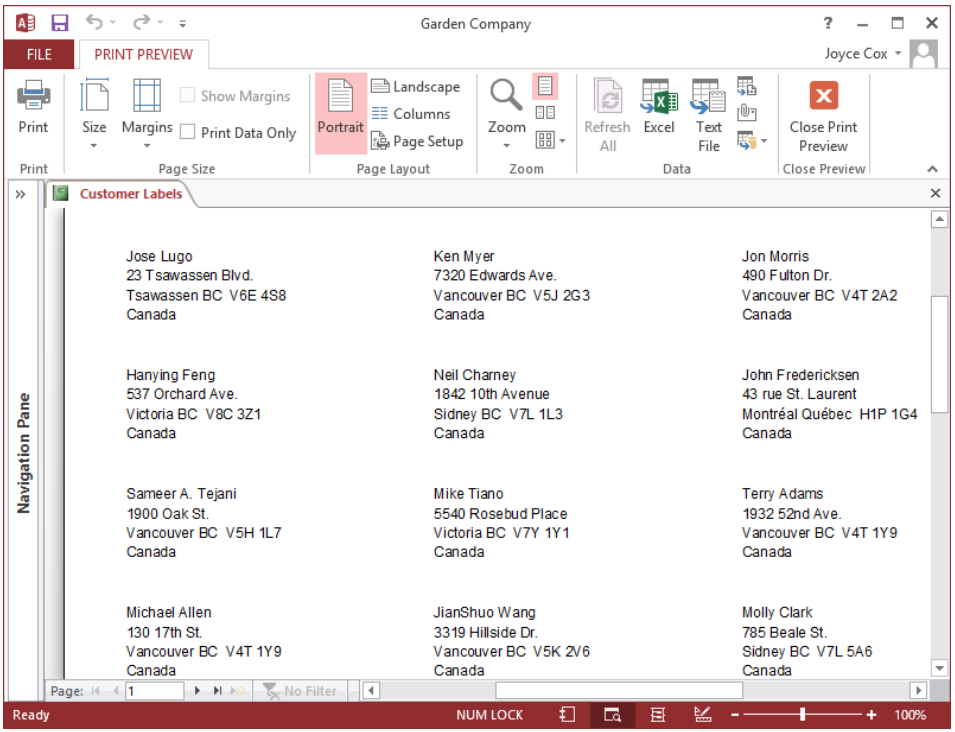
1. In the **Navigation** pane, display the **Reports** group, which includes all the reports that have been created and saved as part of this database.
2. In the **Navigation** pane, right-click **Customer Labels**, and then click **Print Preview** to open the **Customer Labels** report in a view that is much like Print Preview in other Office programs.

   TROUBLESHOOTING If Access notifies you that some data may not be displayed because of column widths and spacing, for the purposes of this exercise, simply click OK to continue.

TIP Access provides a wizard that can help you create a mailing label report. You can also create labels like these by using the Customers table as a data source for the Microsoft Word 2013 mail merge tool. For information about mail merge, refer to *Microsoft Word 2013 Step By Step* by Joan Lambert and Joyce Cox (Microsoft Press, 2013)

The report is too small to read easily in Print Preview, so let's adjust the zoom percentage.

3 Move the pointer over the report, where it changes to a magnifying glass. Then with the pointer over the middle label at the top of the report, click the mouse button to change the zoom percentage to **100%**.



This report prints customer names and addresses in a mailing label format.

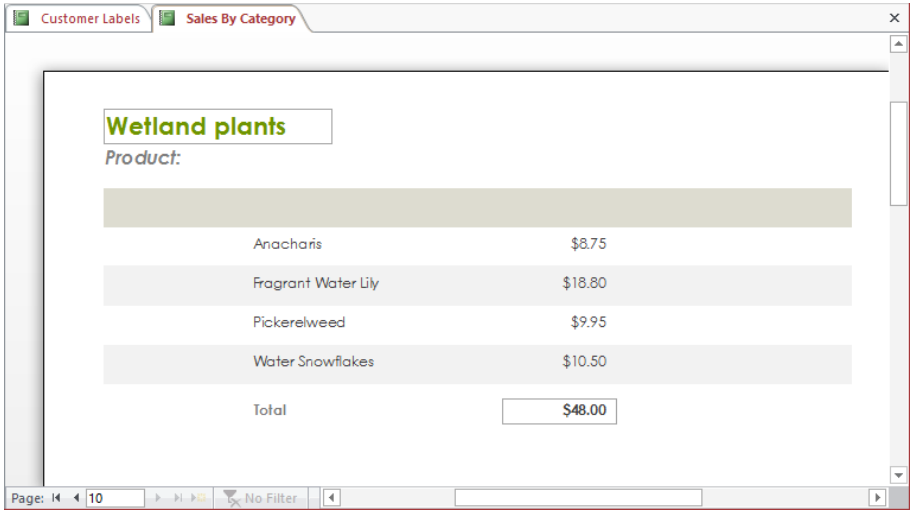
TIP Click the Zoom Level button in the lower-right corner to switch back and forth between the current and previous zoom levels. You can also adjust the zoom percentage by clicking the Zoom In or Zoom Out button (the plus or minus sign) at the ends of the Zoom slider or by dragging the Zoom slider. To set a specific zoom percentage, click the Zoom arrow in the Zoom group on the Print Preview tab and then click the percentage you want.

Now let's look at another report.

4 In the **Navigation** pane, right-click the **Sales By Category** report, and then click **Print Preview**. This report generates several pages of information by combining data from the **Categories** table and the **Products** table.

5 Use any method to zoom the page to **100%**.

6 On the page navigation bar in the lower-left corner of the page, click the **Last Page** button to move to the end of the report.

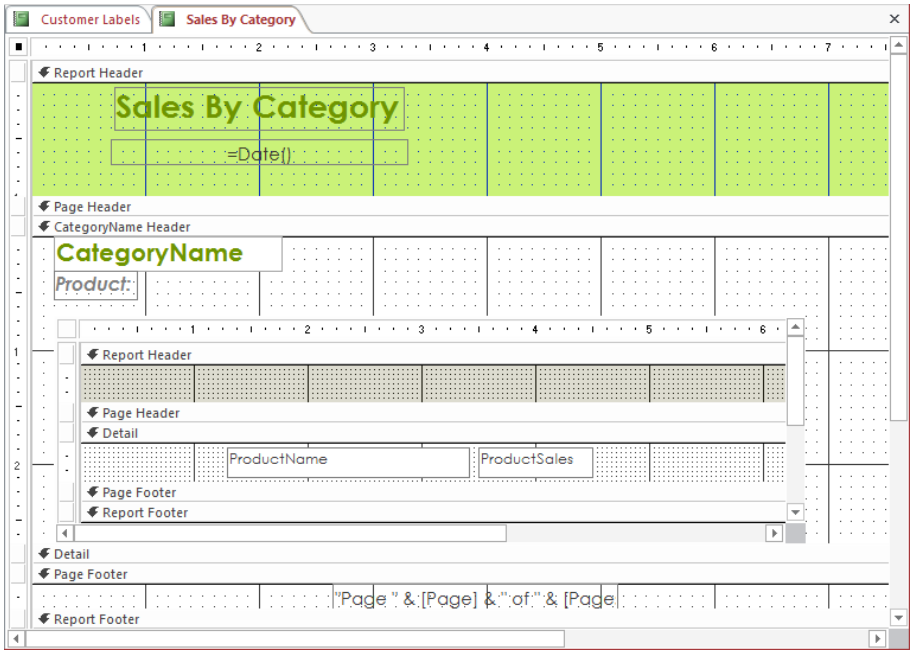


In this report, each category appears on its own page with a list of the products in that category and their prices.

7 Click the **Previous Page** button a few times to view a few more pages of the report.

Let's look at the structure of this report in Design view.

8 On the **View Shortcuts** toolbar, click the **Design View** button. Notice that in this view, the report looks similar to a form.



You create reports by using the same techniques you use to create forms.

CLEAN UP **Close the open reports. Keep the GardenCompany01 database open for use in the last exercise.**

Previewing and printing database objects

Because Access is a Windows application, it interacts with your printer through standard Windows dialog boxes and drivers. This means that any printer that you can use from other programs can be used from Access, and any special features of that printer, such as color printing or duplex printing, are available in Access.

The commands for printing database objects are available from the Print page of the Backstage view. From this page, you can do the following:

- Print the active object by using the default settings.
- Display the Print dialog box, where you can select the printer you want to use, in addition to adjusting various other settings appropriate to the active object and the current view.
- Display the active object in Print Preview.

In this exercise, you'll explore the printing options for a table and a form.

SET UP **You need the GardenCompany01 database you worked with in the preceding exercise to complete this exercise. If necessary, open the database, and then follow the steps.**

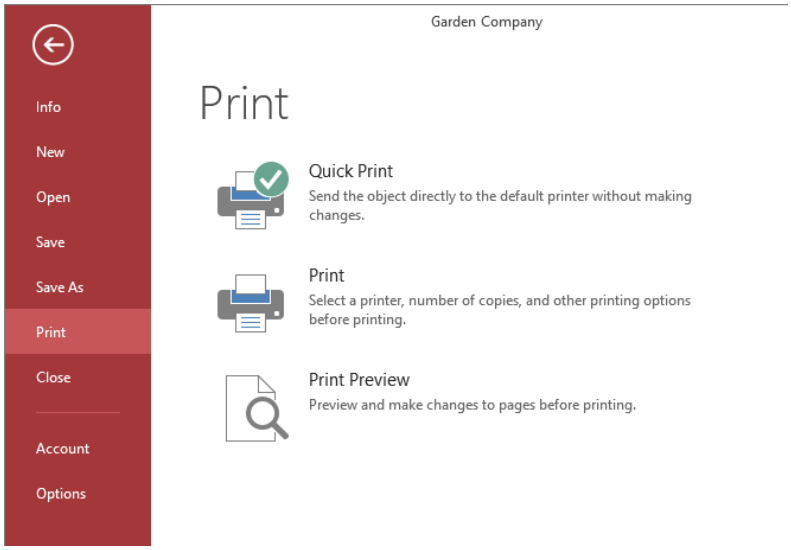
1 In the **Navigation** pane, display the **All Access Objects** group.

2 In the **Tables** group, double-click the **Employees** table to open it in **Datasheet** view.

Access will not print data that is not visible on the screen, so let's first make sure all the columns display all their data.

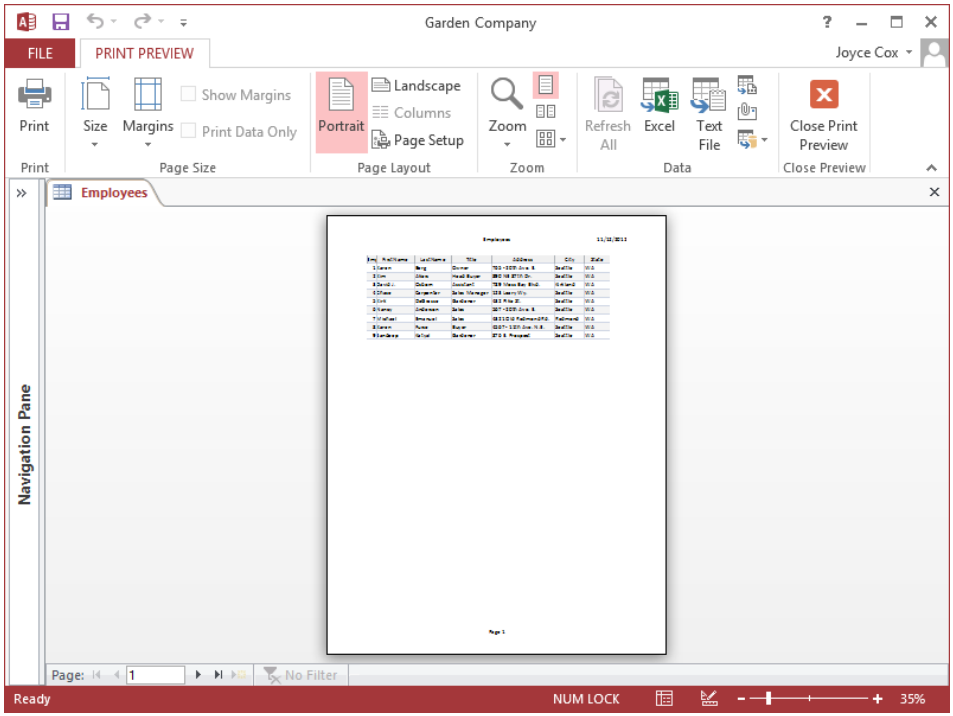
3 Manually adjust the widths (don't double-click between the columns) of all the columns so that all the values in the fields are visible. (Don't worry about showing the complete column heading; just focus on the values.)

4 Display the **Backstage** view, and in the left pane, click **Print**.



From the Print page of the Backstage view, you can print the current database object with the default print settings, change the settings, and preview the object.

5 On the **Print** page, click **Print Preview** to preview the first page of the **Employees** table.



By default, the Employees table is displayed in Portrait orientation.

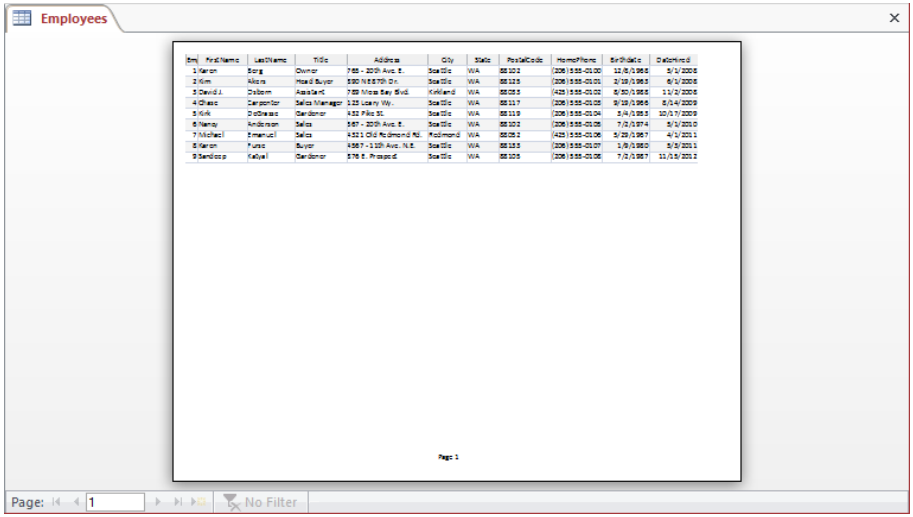
TIP This is the only way to preview a table, a query results datasheet, or a form. There is no Print Preview command available when you right-click one of these objects, and there is no Print Preview button on the View Shortcuts toolbar or in the View button list, as there is for reports.

6 On the page navigation bar at the bottom of the window, click the **Next Page** button. Then click the **First Page** button to move back to page **1**.

With the current settings, this datasheet will print as two short, vertically oriented pages. Let's adjust the settings.

7 On the **Print Preview** tab, in the **Page Layout** group, click the **Landscape** button to switch to that orientation. Then click the **Next Page** button. Notice that the datasheet still occupies two pages, with only one field on the second page.

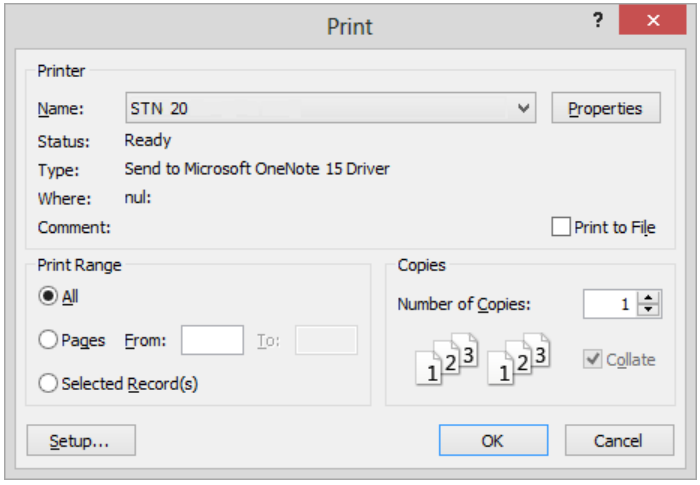
8 In the **Page Size** group, click the **Margins** button, and then click **Narrow**.



The buttons on the page navigation bar are now gray, indicating that the Employees table fits on one page.

TIP You can set custom margins by clicking the Page Setup button in the Page Layout group and then adjusting the Top, Bottom, Left, and Right settings on the Print Options page of the Page Setup dialog box.

9 In the **Print** group, click the **Print** button to open the **Print** dialog box.



In the Print dialog box, you can select the printer and set print options such as the pages or records to print, and the number of copies.

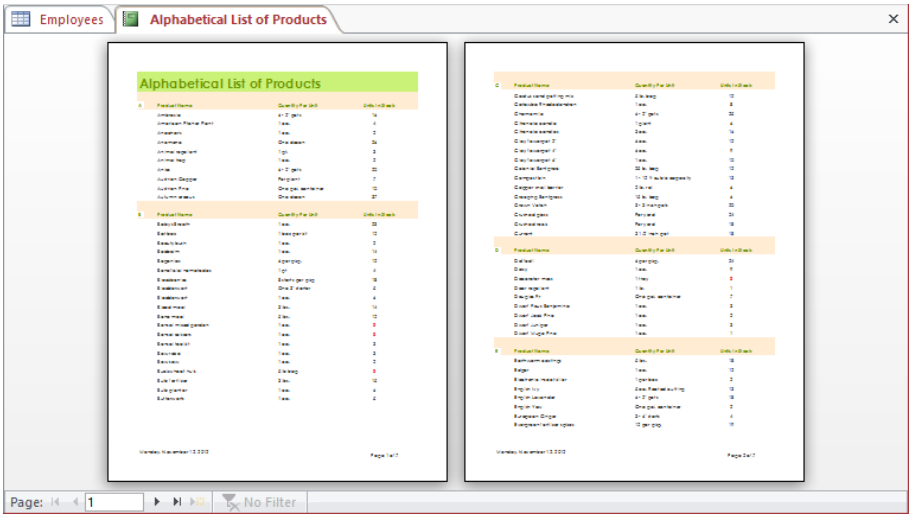
10 Click **Cancel** to close the **Print** dialog box, and then in the **Close Preview** group, click the **Close Print Preview** button.

Now let's take a look at a report.

11 In the **Navigation** pane, in the **Reports** group, double-click **Alphabetical List of Products**.

12 On the **View Shortcuts** toolbar, click the **Print Preview** button to display the report information as it will be printed.

13 On the **Print Preview** tab, in the **Zoom** group, click the **Two Pages** button to display the first two pages of the report side by side.



You can preview more than one page at a time.

14 On the **View Shortcuts** toolbar, click the **Report View** button to return to that view.

CLEAN UP **Close the Alphabetical List Of Products report and the Employees table, saving your changes if you want to. Then close the GardenCompany01 database.**

Key points

- The Access user interface provides intuitive access to all the tools you need to create and maintain a database.
- A database is the computer equivalent of an organized list of information.
- Tables are the core database objects. They organize data in columns and rows, called *fields* and *records*.
- In a relational database, tables can be related based on common fields, enabling the retrieval of information from more than one table at the same time.
- The purpose of the other database objects—forms, reports, queries, macros, and modules—is to interact with one or more tables.
- Every database object has two or more views. For example, you view data in a table in Datasheet view and define how the data is structured in Design view.
- If you want to print a database object, be sure the information you need is visible on the screen before you print.