

simplain simple

Microsoft[®] Access[®] 2010

Your easy, colorful, SEE-HOW guide to Access!

Curtis D. Frye

Microsoft°

Microsoft[®] Access[®] 2010 Plain & Simple

Curtis D. Frye

Copyright © 2010 by Curtis D. Frye

Complying with all applicable copyright laws is the responsibility of the user. All rights reserved. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without express written permission

Printed and bound in the United States of America.

$2\ 3\ 4\ 5\ 6\ 7\ 8\ 9\ 10\ QG\ 7\ 6\ 5\ 4\ 3\ 2$

Microsoft Press titles may be purchased for educational, business or sales promotional use. Online editions are also available for most titles (*http://my.safaribooksonline.com*). For more information, contact our corporate/institutional sales department: (800) 998-9938. Send comments to *mspinput@microsoft.com*.

Microsoft, Microsoft Press, ActiveX, Excel, FrontPage, Internet Explorer, PowerPoint, SharePoint, Webdings, Windows, and Windows 7 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Other product and company names mentioned herein may be the trademarks of their respective owners.

Unless otherwise noted, the example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted herein are fictitious, and no association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred.

This book expresses the author's views and opinions. The information contained in this book is provided without any express, statutory, or implied warranties. Neither the author, Microsoft Corporation, nor their respective resellers or distributors, will be held liable for any damages caused or alleged to be caused either directly or indirectly by such information.

Acquisitions and Developmental Editor: Kenyon Brown

Production Editor: Loranah Dimant Copy Editor: Nancy Sixsmith Editorial Production: Octal Publishing, Inc. Technical Reviewer: Mark Reddin Compositor: Ron Bilodeau Illustrator: Robert Romano Indexer: Ginny Munroe

978-0-7356-2730-7

Contents



Introduction: About This Book

No Computerese!	L
A Quick Overview	2
A Few Assumptions	1
A Final Word (or Two)	1



What's New in Access 2010?

Managing Access Settings and Files in Backstage View.	6
Customizing the Access 2010 User Interface	7
Creating Databases Using Improved Templates	7
Building Databases by Re-Using Application Parts.	7
Creating Navigation Forms	8
Formatting Database Objects Using Office Themes.	8
Gaining Insights into Data Using Conditional Formatting	9
Defining Calculated Fields Using the Improved Expression Builder	9



Introducing Access 2010

Starting Access 2010	13
Opening a Database	16
Viewing Multiple Database Objects	18
Closing a Database and Exiting Access 2010	19
Displaying and Managing Database Objects	20
Using the Access 2010 Help System	22

1

5



Creating a Database

Viewing a Sample Database	28
Creating a New Database	29
Creating Databases Using Database Templates	31
Creating a New Table in Design View	33
Creating a New Table by Typing	35
Creating a New Table Using a Template	36
Creating a New Table Using Application Parts	38
Setting a Primary Key	39
Getting Data from Other Access 2010 Tables	40
Creating Relationships Between Tables	44
Enforcing Referential Integrity	46



Customizing Fields	47
Working with Tables	
Assigning a Data Type	50
Viewing or Changing Field Properties	52
Formatting Field Contents	54
Creating Input Masks	56
Assigning Required Fields and Requiring Data Entry	58
Setting Default Values	59
Indexing Field Values	60
Validating Data Entry	
Creating a Lookup Field	62
Creating an Append-Only Memo Field	66
Creating an Attachment Field	67



Customizing Tables

Finding and Replacing Text	
Entering Data Using AutoCorrect	72
Adding and Editing Text	
Manipulating Columns	
Modifying Columns and Rows	
Viewing a Subworksheet	80
Filtering Table Records	82



Creating Forms

Creating a Simple Form	88
Creating a Form Using the Form Wizard	. 00
Creating a Form in Design View	. 0.2
	. 90
Creating a Multiple Items Form	. 92
Modifying an Existing Form	. 93
Adding and Deleting Form Controls	. 95
Adding a Date Picker Control	. 98
Creating a Subform	. 99
Displaying a Form and Its Datasheet Simultaneously	101



Creating Queries	103
Creating a Query Using the Query Wizard	106
Editing a Query in Design View.	110
Using Criteria to Focus Query Results	113
Using Queries to Calculate Values	115
Creating a Parameter Query	116
Finding Duplicate Records	117

69

87

Finding Unmatched Records	119
Writing Query Results to a New Table	121
Creating an Update Query	122
Creating a Crosstab Query	123
Finding the Largest and Smallest Values in a Field by Using a Query	125



Creatin	g Reports
	Creating a Report Using the Report Wizard
	Creating a Summary Report.
	Creating a Report in Design View
	Modifying an Existing Report





Beautifying Forms and Reports

Formatting Text	146
Applying Office Themes	148
Setting Control Appearance	152
Adding Lines, Shapes, and Borders	156
Showing Gridlines in a Report	158
Coloring Alternate Rows in a Form or Report	160
Adding a Totals Row to a Worksheet	161
Adding a Picture	162
Applying Conditional Formatting	164

Changing the Source of an Image	166
Setting Image Alignment and Backing Color	167
Tiling a Picture	169
Setting Image Height and Width	170



Creating Charts in Access 2010

Creating a Chart	. 174
Formatting Chart Elements	. 176
Customizing Chart Axes	. 179
Add Information to a Chart	. 181
Changing a Chart's Type	. 184



Interacting with Other Programs 185 Importing Data from an Excel 2010 File......200 Publishing Data to Word 2010216



Administering a Database

Encrypting a Database	
Locking Database Records	
Creating a Navigation Form	
Documenting a Database	
Setting Startup Options	



Customizing Access 2010235Adding Commands to the Quick Access Toolbar236Modifying the Ribbon User Interface238



Presenting Table and Query Data Dynamically	247
Creating a PivotTable	
Adding and Removing PivotTable Fields	
Pivoting a PivotTable	
Filtering PivotTable Data	
Formatting a PivotTable	
Creating a PivotChart	258

What do you think of this book? We want to hear from you!

Microsoft is interested in hearing your feedback so we can continually improve our books and learning resources for you. To participate in a brief online survey, please visit:

www.microsoft.com/learning/booksurvey/

Creating Queries

In this section:

- Creating a Query Using the Query Wizard
- Editing a Query in Design View
- Using Criteria to Focus Query Results
- Using Queries to Calculate Values
- Creating a Parameter Query
- Finding Duplicate Records
- Finding Unmatched Records
- Writing Query Results to a New Table
- Creating an Update Query
- Creating a Crosstab Query
- Finding the Largest and Smallest Values in a Field by Using a Query

Database tables store data, but even the best-designed table has limitations. For example, if a table holds more than a few dozen records, it's difficult to look through the table and find records that meet a particular criterion. You might, for example, want to display all orders from a specific customer without having to wade through the entire table to find them.

Enter the query. A query is a Microsoft Access 2010 object that lets you find just those table records you're interested in, whether you want to see all orders from customers in Germany or to identify customers who have never placed an order. You can also create queries that let you and your colleagues type the value for which they want to search. For example, rather than always search for orders by customers in Germany, you could create a query that asks which country to look for.

Introducing Query Types

When you want to retrieve table records that meet particular criteria, you create a query. The type of query you create, however, depends on the records you want to return and what, if anything, you want Access to do with the results.

The most basic query type is the select query, which reaches into one or more database tables and locates records. While you can have Access return every field in a record, you can also choose which fields are displayed in the results. For example, you could get information about customers that placed an order in a given month and, instead of displaying every field relating to the company, display just the company's name. You can also limit the records returned by the query by specifying one or more criteria or rules the query uses when deciding which table rows to return. If your table contains data that relates to two different values, such as a company name and sales representatives, you can create a crosstab query to display the quantity of items sold by each employee to each company (as shown in the following figure).

A version of the select query is the parameter query. Like a select query, the parameter query uses one or more criteria to limit the records returned by the query. The difference, however, is that a parameter query lets the person running the query specify the criteria Access uses to decide whether or not to return a specific record. You can add a message to the criteria entry dialog box that lets the searcher know what kind of value to enter.

application Parts - Design Lists remplates Tables	Viente Query Query Viente Design Form Blank Minis Query Query Viente Design Origin Form Blank Minis Minis Portigin Form Tormo	m Wizard Igabion * re Forms = Report Report Blank Design Report Report	Report Wizard	Macro & Module Macro Wisual Basic Macros & Code	
All Access Objects 🛛 🖲 🕯	Product Sales Qty by Employee and Date_Cross	tab			×
iearch. 🖉	Product Name	- Total Of Surr - Andrew Cen -	Anne Hellur -	Jan Kotas - Laura (alussa - Mariy
Tables ¥	Northwind Traders Almonds	1			
Queries 🎗	Northwind Traders Beer	3	1		
Product Sales Qty by Empl	Northwind Traders Boysenberry Spread	2	1		
Customers Extended	Northwind Traders Cajun Seasoning	2	1		
Employees Extended	Northwind Traders Chaselate				
Jinventory	Northwind Traders Chocolate Bisouits Mi		1		
Inventory on Hold	Northwind Traders Clam Chowder				
	Northwind Traders Coffee	2	1		
anventory on Order	Northwind Traders Crab Meat	3	1		
Inventory Purchased	Northwind Traders Curry Sauce	4			1
Inventory Sold	Northwind Traders Dried Apples	2 1		1	
Invoice Data	Northwind Traders Dried Pears	2 1		1	
Order Details Extended	Northwind Traders Dried Plums	4	1	1	
Drder Price Totals	Northwind Traders Fruit Cocktail	1			
	Northwind Traders Gnocchi	2 2			
	Northwind Traders Green Tea	3 1			
Order summary	Northwind Traders Long Grain Rice	1		3	
Product Category Sales by	Northwind Traders Marmalade	1		1	
Product Orders	Northwind Traders Mozzarella	2			
Product Purchases	Northwind Traders Olive Oil	1	1		
Product Sales by Category	Northwind Traders Ravioli	1			
Product Sales Oty by Empl	Northwind Traders Scones	1	1		
Product Sales Total by Date	Northwind Traders Syrup	1			
Destinate as first Out -					
Products on Beck Order					
Purchase Details Edended					

A separate type of query is the action query, which makes changes to the physical makeup of your database. You see two types of action queries in this chapter: the update query, which lets you change values in a table; and the make-table query, which writes query results to a new table in the current database (or another database entirely).

The final query type discussed in this section is the crosstab query. Unlike a select query, which presents its results in a worksheet, a crosstab query presents its results in a layout like that of a spreadsheet. Every value in the body of the query's results is related to two other values. In this case, those values are your suppliers and your product categories. As in a spreadsheet, you can choose the mathematical operation Access uses to summarize the data in the body of the crosstab query's results. Available operations include finding a sum, average, the number of occurrences (as in the crosstab query results shown previously), or even the minimum or maximum value.

After you create a query (as shown following), you can display its results by double-clicking the query in the Navigation Pane. If the query is open in Design view, you can run it by clicking the Run button on the Design tab.



Creating a Query Using the Query Wizard

When you create a basic select query, you identify the table (or tables) with the data you want to find, name the fields to appear in the query results, and then save the query. The Query Wizard walks you through the process, making it easy to identify the tables and fields to appear in your query. What's more, you can choose whether to have Access display detailed results (that is, the individual query rows) or summarize the query's contents.



Create a Detail Query

- Click the Create tab.
- Click Query Wizard.
- 3 Click Simple Query Wizard.
- 4 Click OK.



- 5 Click the Tables/Queries down arrow, and then click the table or query with the fields you want to use in your query.
- 6 Click the first field to include in the query's results.
- 7 Click Add.
- Repeat steps 6 and 7 to add more fields (and step 5 to change the table or query from which you draw fields).
- 9 Click Next.
- 10 Click the Detail option button.
- (11) Click Next.
- 12 Type a name for your query.
- (13) Click Finish.

Simple Query Widard Simple Query Witard eds do you want in ve Would you like a detail or summary overv? 10 Detail (shows every field of every record) in Table or more Simary Iables/Queries Table: Customers Available Fields First Name E-mail Addresi Job Title >> < << Cancel < gack gent > grish Cancel gest > Ensh





The step of the wizard that asks whether you want to create a detail or summary query appears only for some types of queries; don't panic if you don't see it.

Create a Summary Query

- Click the Create tab.
- Click Query Wizard.
- 3 Click Simple Query Wizard.
- 4 Click OK.
- 5 Click the Tables/Queries down arrow, and then click the table or query with the fields you want to use in your query.
- 6 Click the first field to include in the query's results.
- Click Add.
- 8 Repeat steps 6 and 7 to add more fields (and step 5 to change the table or query from which you draw fields).
- Click Next.



Creating Queries

- 10 Click the Summary option button.
- (1) Click Summary Options.
- Select the check boxes representing the summary values you want calculated.
- 13 Click OK.
- (14) Click Next.
- Select the option button representing how you want the query to group rows in the query's source table.
- (16) Click Next.
- 🚺 Type a name for your query.
- (18) Click Finish.







Editing a Query in Design View

After you create a query, you can modify it by opening it in Design view. In Design view, you can add a table to the Query design area, add or remove query fields, or even add every field from a table in one step.

Open a Query for Editing

- Display the queries in your database.
- 2 Right-click a query.
- Click Design View.



Add a Table to a Query

- (1) Open the query in Design view.
- **2** Click the Show Table button.
- Click the table to add.
- 4 Click Add.
- 5 Click Close.



Creating Queries

Add a Field to a Query

- (1) Open the query in Design view.
- 2 Drag a field to a Field cell.

Tip

To add every field from a table to a query's results, drag the asterisk from the table's box in the table area to a Field cell in the Query design grid.

Tip

To enable a query with more than one table to return meaningful results, the two tables must be linked by a relationship.



Create a Query in Design View

- Click the Create tab. $(\mathbf{1})$
- Click Query Design. (2)
- 3 Click the first table or query you want to add.

A

Parts * All Access Obi

Starch

Tables

Queries

J Inventory

Jiventory on Hold

Inventory on Orde

D Inventory Sold Invoice Data

Deder Price Totals Ceder Subtotal

Deder Summary

Product Orders

Product Purchase

- Click Add. (4)
- Repeat steps 3 and 4 to add all the (5) desired tables.
- Click Close. 6
- 7 Drag fields to the design grid.
- Click the Save button. 8
- Type a name for the query. (9)

To remove a table from the design grid,

right-click the table's title bar and then click

(10) Click OK.

Tip

Remove Table.



Creating Queries

Using Criteria to Focus Query Results

It's unlikely that you'll want your query to find every record in a table—if you did, you could just open the table and not bother with the query! To limit the records a query locates, such as finding customers only in Germany, you can add criteria to the fields in the Query design grid.

Set Query Criteria

- Open a query in Design view.
- 2 Click the Criteria cell for the field to which the criterion will be applied.
- 3 Click Builder.
- 4 Create the criterion in the Expression Builder.
- 5 Click OK.

You can also type the criterion into the Criteria cell directly.



Tip

To use a text string, enclose the string in quotation marks (for example, "Germany"). If you forget, Access adds the quotes if it recognizes the criterion as a text string.

Introducing Operators

Arithmetic Operators

There are several types of database objects and tools you need to use when you create a criterion to narrow the records returned by a query or to calculate a value. The first set of objects to which you need to refer includes database tables and their fields. For example, to calculate the subtotal of a line in the Northwind sample database's Order Details table, multiply the Unit Price by the Quantity ordered, and adjust the total if the customer gets a discount (as noted in the Discount field). The expression to perform the first part of that calculation is [Order Details]![UnitPrice]*[Order Details]![Quantity].

Note that table fields are called out with the name of the table enclosed in square brackets, an exclamation point, and then the name of the field in square brackets.

OperatorDescription-Subtraction (6-4=2)*Multiplication (6*4=24)/Division (6/4=1.5)/Integer division (6\4=1)+Addition (6+4=10)ModModular division (6 Mod 4=2)

Comparison Operators

Operator	Description
<	Less than
<=	Less than or equal to
<>	Not equal to
=	Equal to
>=	Greater than or equal to
>	Greater than
Between "Value1" And "Value2"	Between two values, inclusive (for example, Between "1" And "3" would return "1, 2, 3")

Logical Operators

Operator	Description
AND	Both elements of an expression must be true.
NOT	The expression must evaluate as false.
OR	At least one element of an expression must be true.
XOR	Exactly one element of an expression must be true, not both.

Creating Queries

Using Queries to Calculate Values

One popular use for database tables is to maintain sales records with fields for the order identifier, the product ordered, and the product's price. What you can't do in a table is perform a calculation—the fields are just designed to hold data. In a query, however, you can find totals, averages, or even the minimum or maximum value in the records found by your query.

Calculate a Value in a Query

- Open a query in Design view.
- Click Totals to add the Total row to the Query design grid.
- 3 Click the Field cell in the column in which you want to calculate the value.
- 4 Click Builder.
- 5 Build the calculation in the Expression Builder.
- 6 Click OK.
- In the Field cell with the calculation, edit the value to the left of the colon to reflect the name you want for the field when the query results are displayed as a worksheet.

8 Click Run.

Tip

To select fields from other tables for use in a calculation, double-click the Tables icon in the left pane of the Expression Builder, double-click the table with the target field, and then double-click the field name in the center pane.



Creating a Parameter Query

Some of the time, you can create a query that always looks for the same information, such as orders from a specific country or the total orders from an established customer. Other times, however, you and your colleagues need the flexibility to enter a criterion (such as a country) into the query to focus the results correctly. You can do that by creating a parameter query, which lets you specify the criterion the query uses to find records.

Build a Parameter Query



- Type the prompt surrounded by square brackets in the Criteria cell in the column representing the field in which you want to find the entered value.
- Click Run to test the query.
- Type a value in the message box that appears.
- Click OK.

Caution

If you don't type a prompt between the square brackets, the only indication you get to enter a parameter is a blank dialog box. If someone unfamiliar with the database runs the query, he or she will have no idea what to type in the box.



Finding Duplicate Records

The standard select query locates records that meet a criterion, such as orders made by a particular customer during a given month. However, you might also be interested in finding those customers who placed more than one order in a month. If all orders for a month are recorded in the same table, you could create a Find Duplicates query to locate CustomerID values that occur more than once in the table.

Create a Find Duplicates Query

- Click the Create tab.
- Click Query Wizard.
- Click Find Duplicates Query Wizard.
- 4 Click OK.





Finding Unmatched Records

When two tables are in a one-to-many relationship, you can create a Find Unmatched Records query to identify any records in the table on the "one" side that have no corresponding records in the table on the "many" side. For example, in the Northwind sample database, because the Customers and Orders tables are in a one-to-many relationship, you could identify customers that have never placed an order.

Create a Find Unmatched Records Query

- Click the Create tab.
- Click Query Wizard.
- Click Find Unmatched Query Wizard.
- 4 Click OK.

Try This!

Open the Northwind sample database, click the Create tab, click the Query Wizard button, click Find Unmatched Query Wizard, and then click OK. Click Table: Customers and then click Next. In the next screen, click Table: Orders and then click Next. Verify that ID is highlighted in the Customers table and that CustomerID is highlighted in the Orders table; then click Next. Click Company, click the Add button, and then click Next. In the final screen, click Finish to accept the query name Access suggests. The query you create displays customers that have not placed an order.



- 5 Click the table in which you want to find unmatched records.
- 6 Click Next.
- Click the table or query with related records.
- 8 Click Next.
- If necessary, click the field in the left pane that is in the table on the "one" side of the relationship.
- If necessary, click the field in the right pane that is in the table on the "many" side of the relationship.
- Click the Match button to identify the equivalent fields.
- 12 Click Next.
- Click the name of a field to display in the query results.
- 14 Click Add.
- Repeat steps 13 and 14 as needed to add fields to the display.
- 16 Click Next.
- **17** Type a name for the query.
- 18 Click Finish.



Writing Query Results to a New Table

When you run a query, Access writes the records the query finds into a dynaset, or dynamic record set. While Access remembers the results of queries you run, the results aren't actually written to a table, limiting what you can do with the data. You can, however, modify a select query so the results are written to a new table.

Create a Make-Table Query A 🖌 🖌 01 - 1= File Creat Open a query in Design view. Click Make Table. View Run Results Type a name for the new table. All Access Objects . ≪ Search Q Tabler × 🔺 Click OK. Queries \$ Product Sales Oty by Empl... Customers Extended Click Run. Employees Extended Inventory Click Yes to create a new table that 🗊 Inventory on Hold contains the selected records. Inventory on Order Inventory Purchased Inventory Sold 🗊 Invoice Data order Details Extended order Price Totals Tip 🗇 Order Subtotals 📑 Order Summary Product Category Sa You can write the results of your query to a

table in another database by selecting the Another Database option in the Make Table dialog box, clicking the Browse button, and using the file navigation dialog box to identify the database to receive the table.



Creating an Update Query

One exciting aspect of business is how guickly things change of course, it can be difficult to keep track of all those changes! One useful task you can perform with an update guery is to modify values in a table to reflect changes in your business

environment. For example, if a supplier increases prices by 5 percent, you can create an update guery that moves through your Products table and updates the records for that supplier's products.

> \$3 00

Northwind 2010 : Database (Access 2007) - Microsoft Access External Data Database Tools Create Property [?] Table Names (1) Union Hansert Rows Property Sheet -1 × Σ Pass-Through ⇒ Delete Rows 😾 Delete Columns View Select Make Append Update Crosstab Delete Totals Parameters Run Show 2. Data Definition Table A Builder Return: Result Query Setup Show/Hide All Access Objects 🕞 « 📑 Products Query 2 Search. Products Tables A 4 Reorder Level Customers Target Level Employee Privileges Quantity Per Ur Discontinued Employee Travel Data Minimum Reord Employees Category Attachments Interest Charges Inventory Transaction Type: Inventory Transactions Invoices Order Details Order Details Status Orders 4 1 Orders Status Field: Supplier IDs Product Code Product Name Categor Orders Tax Status Table: Products Products Products Product Update To: "Supplier N" Privileges Criteria: Soup* Products Purchase Orde Details Purchase Or Status Purchase Or Sales Report Shippers 4 m Strings Suppliers Querier Num Lock 🛛 🔟 sol 😼 Ready

Update Table Values with a Query

- Open a query in Design view. (1)
- Click Update.
- In the Criteria cell of the column you'll use to select the records to update, type the expression used to select which values should be updated.
- In the Update To cell of the column that contains the value to be updated, type the expression used to update the values.
- Click Run. (5)

See Also

For more information about ensuring that table data is updated to reflect changes in a related table, see "Enforcing Referential Integrity" on page 46.

Creating a Crosstab Query

The basic means of storing and presenting data in Access is the table, which is essentially a list of information about a group of "things" (such as customer orders) related to a single primary

key value. Another way to present data is in a crosstab query, which relates one value (such as a total or an average) with two other values (such as a customer and a month).

Build a Crosstab Query

- 1 Click the Create tab.
- Click Query Wizard.
- Click Crosstab Query Wizard.
- 4 Click OK.



- 5 Click the table or query to provide the values for your crosstab query.
- 6 Click Next.
- Click the field to provide values for the row headings.
- 8 Click Add.
- Click Next.
- Click the field to provide values for the column headings.
- 11 Click Next.
- Click the field to provide values for the data area (body) of the crosstab query.
- Click the summary calculation to be performed on the values in the data area.
- 🚺 Click Next.
- **15** Type a name for the query.
- 16 Click Finish.



Creating Queries

Finding the Largest and Smallest Values in a Field by Using a Query

When you create a query, you can have Access display a set number of the highest and lowest values in the query's results. You can also have Access display rows that contain the top or bottom values by asking Access to display a certain percentage of rows in the query's results. For example, if you reward the top 10 percent of your sales staff, you can create a query that sorts the query results according to the values in the Total Sales field and displays the best values. When you filter a query's results by a percentage, you don't need to know the exact number of records in your table. In other words, if your sales staff is made up of 40 employees, creating a query that displays the top 10 percent of sales totals will return the top 4 representatives.

Find the Largest Values in a Field

- Open a query in Design view.
- 2 Click the Sort cell of the field in which you want to find the top values.
- 3 Click the down arrow that appears.
- 4 Click Descending.
- 5 If necessary, click the Design tab.
- 6 Using the Top Values field control, perform any of these tasks:
 - Click the control's down arrow and select a default value to specify the number of values or the percentage of values to display.
 - Type a number indicating the number of values you want displayed in the query results.
 - Type a percentage indicating the portion of the table's rows you want displayed in the query results.
- Click Run.



Find the Smallest Values in a Field

- Open a query in Design view.
- 2 Click the Sort cell of the field in which you want to find the top values.
- **3** Click the down arrow that appears.
- Click Ascending.
- 5) If necessary, click the Design tab.
- 6 Using the Top Values field control, perform any of these tasks:
 - Click the control's down arrow and select a default value to specify the number of values or the percentage of values to display.
 - Type a number indicating the number of values you want displayed in the query results.
 - Type a percentage indicating the portion of the table's rows you want displayed in the query results.

7) Click Run.



To have your query display all its results, return to Design view, click the Design tab, click the Top Values field's down arrow, and then click All.



Index

A

Access 2010 Backstage view, 5 Access 2007 Microsoft Office Button, 5 Access 2010 Backstage view, 2 customizing, 235 AutoCorrection Options, 243-245 Ribbon, 238–242 Accounting Number Format button, 178 action queries, 105-106 Add & Delete group adding fields, 36 Add Existing Fields pane, 90 Addition operator, 114 administration, 221 creating navigation forms, 227-228 documenting databases, 229 setting startup options, 230-233 aligning form controls, 155 images, 167 objects, 155 report controls, 155 AND operator, 114 Any Part Of Field option, 70, 71 append-only memo fields, 66 creating, 66 Application Parts, 5 creating databases, 7 creating forms, 38 creating reports, 38 creating tables, 38

arithmetic operators, 114 Attachment control, 97 Attachment data type, 51 attachment fields creating, 67 AutoCorrect data entry, 72-74 Stop Automatically Correcting entry, 73 AutoCorrection Options changing, 243-245 AutoCorrect Options adding rules, 244 deleting entries, 245 AutoCorrect Options smart tag, 73 Automatically Process Replies And Add Data To Table option, 219 AutoNumber data type, 50, 51 AutoNumber field, 39 Available Fields box, 89 axes charts customizing, 179-180 displaying gridlines, 180 aridlines, 179 hiding gridlines, 180 titles, 179

B

backing colors images, 167 Backstage view, 2, 5 managing files, 6 managing settings, 6 backups tables, 48 blank databases creating, 29 borders controls, 156–157 Bound object frame control, 97

C

Calculated data type, 51 calculated fields creating, 137-138 creating with Expression Builder, 9 calculations Expression Builder, 53 in gueries, 115 reports, 137-138 Totals row, 161 Cascade Delete Related Records check box. 46 Cascade Update Related Fields check box. 46 foreign keys, 46 characters customizing fields, 55 Chart control, 97 charts, 3, 173 adding information to, 181-183 axes customizing, 179-180 displaying gridlines, 180 gridlines, 179 hiding gridlines, 180 titles, 179 chart types, changing, 184 creating, 174-175

charts (continued) Design view, 175 formatting, 176-178 legends changing location, 182 displaying, 181 hidina, 181 PivotCharts, 248, 249 creating, 258-260 previewing, 175 text boxes adding, 183 inserting, 183 charts (Excel) inserting into databases, 192–193 Check box, 97 Chiseled special effect, 153 Clear All button (Office Clipboard), 76 closina subworksheets, 80 colors fill colors changing, 176 form controls, 152 form rows, 160 images, 167 report controls, 152 report rows, 160 themes. 147 columns copying, 78 inserting into tables, 77 modifying, 77-78 movina, 77 multiple columns filtering records by, 85 names, 78 width, 79 Combo box, 97

Command button, 97 commands adding to Ouick Access Toolbar, 236-237 adding to Ribbon, 238 removing from Ouick Access Toolbar, 237 renaming, 241 reordering on Ribbon, 239 Comma Style button, 178 comparison operators, 114 conditional formats, 145 data bar. 165 forms, 164-165 data bar, 165 multiple conditions, 164 reports, 164-165 data bar, 165 conditional formatting, 9 controls Attachment, 97 Bound object frame, 97 Chart, 97 Check box, 97 Combo box, 97 Command button, 97 date picker adding to forms, 98 date picker controls hidina, 98 forms, 152-155 adding, 95-97 adding data picker controls, 98 alianina, 155 colors, 152 deletina, 95-97 distributing horizontally, 153 distributing vertically, 154 lines, 156-157 properties, 96

selecting multiple controls, 153 shapes, 156–157 special effects, 152 Hyperlink, 97 Image, 97 Label, 97 Line, 97 List box, 97 Navigation, 97 Option button, 97 Option Group, 97 Page break, 97 Rectangle, 97 reports, 152-155 adding, 135–136 aligning, 155 colors, 152 deletina, 135-136 distributing horizontally, 153 distributing vertically, 154 lines, 156-157 modifying properties, 136 selecting multiple controls, 153 shapes, 156–157 special effects, 152 selecting multiple controls, 153 Subform/Subreport, 97 Tab page, 97 Text box, 97 Toggle button, 97 Unbound object frame, 97 Web Browser, 97 Control Source property, 137 copying columns, 78 objects, 189 tables from other datasbes, 40-43 text, 75-76

Create Relationship Wizard, 38 criteria crosstab queries, 104 parameter gueries, 104 aueries limiting records, 113–114, 114 select aueries, 104 text strings, 113 Criteria cell adding criteria, 113 crosstab queries, 104, 105 creating, 123-124 Currency data type, 51 customizing Access 2010, 235 AutoCorrection Options, 243–245 Ribbon, 238-242 charts axes, 179-180 fields, 54-55 Ribbon, 7 custom themes creating, 150-151

D

data conditional formatting, 9 importing from databases, 194–195 inserting into fields, 47 referential integrity, 45 tables copying, 40, 40–43 typing, 35 data analysis Excel 2010, 214–215 data bar conditional format, 165 databases. *See also* Northwind sample database creating, 25 Application Parts, 7 blank databases, 29 by saving existing databases, 30 templates, 7, 31-32 decrypting, 224 design field descriptions, 33-34, 34 foreign keys, 27 primary key, 27 tables with single objects, 26 documenting, 229 exporting data to Access 2010 files, 208-209 to text files, 206-207 to Word 2010, 216-217 to XML files, 210-211 importing data from, 194–195 importing data into from Excel 2010 files, 200-201 from text files, 202-203 from XML files, 204-205 Microsoft SharePoint, 7 Northwind sample database forms, 28 ID field, 27 one-to-many relationships, 42 obiects formatting, 8 records locking, 225-226 regular databases, 7 relationships creating, 44-45 one-to-many, 42 saving, 30 selecting folders to save to, 31 security, 222-224 encrypting, 222-224 passwords, 222

tables See tables Web databases, 7 data collections filtering, 249 sending as e-mail messages, 218-220 data entrv AutoCorrect, 72–74 changing AutoCorrect Options, 243-245 charts, 181-183 creating lookup fields, 62-65 default values. 59 reauirina, 58 setting startup options, 230-233 validation, 61 data lists creating lookup fields, 62-65 lookup values, 65 multiple selections, 64 data lists (Excel 2010) importing into databases, 200-201 datasheets displaying with forms, 101 Datasheet view, 48, 69, 91 data types assigning, 50 Attachment, 51 AutoNumber, 50, 51 Calculated, 51 Currency, 51 Date/Time, 51 Hyperlink, 51 Lookup, 51 Memo, 50, 51 Number, 51 OLE Object, 51 Text, 51, 56 Yes/No. 51 data validation, 61

date picker controls adding to forms, 98 hidina, 98 Date/Time data type, 51 Decrease Decimal button, 178 Decrease Horizontal option, 153 Decrease Vertical option, 154 decrypting databases, 224 default values settina, 59 definina relationships, 44–45 deleting. See also removing AutoCorrect entries, 245 controls from forms, 95–97 fields, 48 group levels (reports), 140 navigation forms, 228 Office Clipboard items, 76 primary key, 48 report controls, 135-136 tables from Relationships window, 44 text, 75 themes, 149 descriptions fields, 33-34, 34, 35 desian databases field descriptions, 33-34, 34 foreign keys, 27 primary key, 27 tables with single objects, 26 tables many-to-many relationships, 43 design grid removing tables from, 112

Design view, 48 adding pictures to reports/forms, 162-163 charts, 175 creating forms in, 90, 91 creating gueries, 112 creating reports, 132 creating tables in, 33-34 editing queries, 110-112 lines, 157 modifying forms, 93 Office themes, 147 Detail section (reports), 138 dialog boxes Import Objects importing data from database objects, 41 displaying. See also hiding axis gridlines, 180 chart legends, 181 datasheets with forms, 101 Field List, 94 Field List task pane, 133 fields tables, 94 forms with datasheets, 101 gridlines, 158-159 auerv results, 105, 126 **Quick Access Toolbar, 236** Ribbon elements, 242 display options setting, 233 Division operator, 114 Documenter documenting databases, 229 documenting databases, 229 documents (Word 2010) exporting data to, 216-217

drawing lines forms/reports, 156 duplicate queries finding, 117, 118

Ε

editina field properties, 52-53 forms, 93, 94 input masks, 57 aueries in Design view, 110–112 reports, 133-134 text, 75-76 e-mail messages sending data collections, 218-220 embedding, 186-191 existing objects, 187–188 pictures, 162-163 encrypting databases, 222-224 enforcing referential integrity, 45 Equal Horizontal option, 153 Equals operator, 114 Equal Vertical option, 154 Etched special effect, 153 Excel 2010, 185 charts inserting into databases, 192–193 data analysis, 214-215 importing data into databases, 200 worksheets inserting into databases, 192–193 exporting data to Access 2010 files, 208–209 to text files, 206–207 to XML files, 210–211 data to Word 2010, 216–217 Expression Builder, 53 creating filters, 85 defining field values, 9 IntelliSense, 9 selecting fields from tables for calculations, 115 External Data tab, 40

F

Field List displaying, 94 hiding, 94 Field List box, 252 Field List task pane displaying, 133 hiding, 133 Field Properties pane, 52 fields, 3. See also records adding Field Templates task pane, 25 from Add & Delete group, 36 More Fields button, 36–37 primary key, 39 adding to gueries, 106 adding to tables, 49 arranging, 49 attachment creating, 67 AutoNumber, 39, 50 calculated creating, 137-138

calculated fields creating, 9 crosstab queries, 104 data types assigning, 50 Attachment, 51 AutoNumber, 51 Calculated, 51 Currency, 51 Date/Time, 51 Hyperlink, 51 Lookup, 51 Memo, 51 Number, 51 OLE Object, 51 Text, 51, 56 Yes/No, 51 default values, 59 deleting, 48 descriptions, 33-34, 34, 35 Expression Builder, 53 finding values with gueries, 125-126 foreign keys Cascade Delete Related Records check box. 46 Cascade Update Related Fields check box, 46 names, 45 formatting, 54-55 forms adding, 94 indexing values, 60 input masks, 47 creating, 56-57 editing, 57 Password, 56 Phone Number, 56

lookup creating, 62-65 multiple selections, 64 lookup lists, 47 memo append-only, 66 PivotTables, 250 adding, 252-253 filtering, 255 organizing, 254-255 removing, 252-253 primary key, 27 Cascade Delete Related Records check box. 46 Cascade Update Related Fields check box, 46 deleting, 48 Hide key column check box, 63 indexing, 60 names, 45 properties, 47 editing, 52-53 viewing, 52-53 aueries adding, 111 removing from Selected Fields pane, 129 removing from Selected Fields box, 89 reports adding, 134 required fields assigning, 58 selecting from tables for calculations, 115 select queries, 104 tables adding to forms, 90 displaying, 94 typing data, 35 validating data entry, 61

files Access 2010 files exporting data to, 208-209 creating hyperlinks to, 197 text exporting data to, 206-207 importing data into databases, 202-203 XMI exporting data to, 210-211 importing data into databases, 204-205 File tab, 5 file management tasks, 6 fill colors charts changing, 176 filterina data collections, 249 PivotTables, 255-256 records, 82-85 by contents of multiple columns, 85 by forms, 83 filters removina, 84 Find Duplicate gueries creating, 118 Find Duplicates queries creating, 117 findina duplicate queries, 117, 118 field values with gueries, 125-126 records, unmatched, 119-120 templates online, 32 text, 70-71 Find Unmatched Records queries creating, 119-120 folders

selecting to save databases, 31

fonts charts, 177 foreian kevs Cascade Delete Related Records check box 46 Cascade Update Related Fields check box, 46 creating tables, 27 names, 45 Format property box, 54 formatting charts, 176–178 fields. 54-55 PivotTables, 257 text forms. 146-147 reports, 146-147 forms, 3 Application Parts, 7 compared to reports, 127 conditional formats, 164-165 data bar, 165 controls, 152-155 adding, 95-97 adding data picker controls, 98 aligning, 155 colors, 152 deletina, 95-97 distributing horizontally, 153 distributing vertically, 154 lines, 156-157 properties, 96 selecting multiple controls, 153 special effects, 152 creating Application Parts, 38 in Design view, 90, 91 multiple item forms, 91 simple forms, 88

subforms, 99-100 with Form Wizard, 89 definition, 87 displaying with datasheets, 101 fields adding, 94 filtering table records, 83 images aligning, 167-168 height, 170-171 inserting charts (Excel) into, 192-193 inserting worksheets (Excel 2010) into, 192-193 modifying, 94 navigation adding objects to, 227-228 creating, 8, 227-228 deleting, 228 saving, 228 tabs, 228 Northwind sample database, 28 objects copying, 189 embedding, 186-191 linking, 186–191 manipulating, 189-191 moving, 190 pasting, 190 saving as Web files, 212-213 sizina, 191 Office themes, 145 opening, 93 pictures adding, 162-163 tiling, 169 **PivotTables** creating, 250-251 formatting, 257 names, 251

records locking, 224-225 rows coloring alternate rows, 160 sending data collection e-mail messages, 218-220 setting startup options, 232 splitting, 101 subforms creating, 141 views, 100 text formatting, 146-147 themes, 89 applying, 148 combining elements into existing themes, 149-150 creating, 150, 151 selecting, 148 Form view charts, 175 Form Wizard creating forms, 89 functions, summary (Excel 2010), 214-215

G

graphics. See also images; pictures textures, 169 Greater than operator, 114 Greater than or equal to operator, 114 gridlines chart axes, 179 displaying, 180 hiding, 180 Datasheet view, 91 reports, 158–159 changing appearance, 159 grouping report records, 139–140 grouping levels (reports) creating, 138–140 reordering, 140 group levels (reports) deleting, 140 groups adding to Ribbon tabs, 240

H

heiaht images, 170–171 rows, 79 help subforms, 99 Hide key column check box, 63 hiding. See also displaying axis gridlines, 180 chart legends, 181 date picker controls, 98 Field List, 94 Field List task pane, 133 menus, 231 primary key, 63 Property Sheet task pane, 91 Ribbon elements, 241 HTML Output Options dialog box, 212 Hyperlink control, 97 Hyperlink data type, 51 hyperlinks, 197–199 creating to existing files, 197 to existing objects, 199 to Web pages, 198

ID field Northwind sample database, 27 Image control, 97 images. See also pictures aligning, 167 changing source, 166 colors, 167 forms height, 170–171 reports height, 170-171 importing data from text files, 202-203 data from XML files, 204-205 data into databases from text files, 202-203 Excel 2010 data, 200 tables, 194-195 Import Objects dialog box importing data from database objects, 41 imports copying data from database objects, 41 copying tables from other datasbes, 40 - 43saving, 40 Import Spreadsheet Wizard, 201 Increase Decimal button, 178 Increase Horizontal option, 153 Increase Vertical option, 154 indexina field values, 60 input masks, 47–48 creating, 56 editing, 57 Password, 56 Phone Number, 56

Input Mask Wizard, 57 inserting charts (Excel) into databases, 192-193 columns into tables, 77 controls into reports, 135-136 fields into reports, 134 fields into tables, 49 objects, 187-188 text boxes into charts, 183 text into tables, 75-76 worksheets (Excel 2010) into databases. 192-193 Integer division operator, 114 IntelliSense, 9 interface (Ribbon) customizing, 7, 238-242

Label contro, 97 Label control, 97 labels (mailing) creating, 142-143 printing, 143 Label Wizard creating mailing labels, 142-143 line breaks, 143 largest values (fields) finding with gueries, 125 legends (charts) changing location, 182 displaying, 181 hiding, 181 Less than operator, 114 line breaks Label Wizard, 143 Line control, 97 lines controls, 156-157

linked pictures changing embedded pictures into, 163 linking, 186–191 existing objects, 188 tables, 196 List box, 97 logical operators, 114 Lookup data type, 51 lookup fields creating, 62–65 multiple selections, 64 lookup lists, 47

Μ

mailing labels creating, 142-143 printing, 143 Make-Table queries creating, 121 manipulating objects, 189-191 many-to-many relationships, 43 Memo data type, 51 memo field, 50 append-only, 66 menus hiding, 231 Microsoft Fluent interface. See Ribbon Microsoft Office Button (Access 2007), 5 Microsoft SharePoint, 7 misspellinas changing AutoCorrect Options, 243-245 mlutiple items forms creating, 91 Modular division operator, 114 More Fields button adding field types, 36-37 Move Down button, 140

Move Up button, 140 moving columns, 77 navigation form tabs, 228 objects, 190 Quick Access Toolbar, 237 multiple columns filtering records by, 85 multiple conditions, 164 multiple-field primary key creating, 39 multiple selections lookup fields, 64 Multiplication operator, 114

N

names columns, 78 foreian kevs, 45 objects, 209 PivotTables, 251 primary keys, 45 Ribbon elements, 241 Navigation control, 97 navigation forms creating, 8, 227–228 deleting, 228 objects adding, 227-228 saving, 228 tabs, 228 Navigation Pane displaying query results, 105 Northwind sample database. See also databases creating forms in Design View, 91 creating subforms, 141 creating subreports, 141

distributing controls, 154 filtering records, 85 finding unmatched records, 119 forms, 28 ID field, 27 indexing field values, 60 many-to-many relationships, 43 one-to-many relationships, 42 opening, 28 viewina, 28 Northwind sample database, creating reports, 132 Not equal to operator, 114 NOT operator, 114 Number data type, 51 number format charts, 178

0

objects aligning, 155 changing, 146 copying, 189 creating hyperlinks to existing objects, 199 documenting, 229 embedding, 186-191 existing objects, 187-188 formatting Office Themes, 8 forms. See forms linking, 186–191 existing objects, 188 manipulating, 189-191 names, 209 navigation forms adding, 227-228 pasting, 190

queries. See queries reports. See reports saving as Web files, 212-213 sizing, 191 tables designing with single objects, 26 themes. See themes viewing, 146 Office Clipboard, 75, 75-76 removing items from, 76 Office.com Web site finding templates online, 32 templates, 31 Office themes, 145, 147 applving, 148 colors, 147 combining elements into existing themes, 149 creating, 150-151 deleting, 149 selecting, 148 Office Themes, 5 formatting database objects, 8 OLE Object data type, 51 one-to-many relationships, 42 creating subreports, 141 finding unmatched records, 119–120 subworksheets, 80-81 opening forms, 93 Northwind sample database, 28 queries, 110 reports, 133-134 subworksheets, 80 operators Addition, 114 AND, 114 arithmetic, 114

comparison, 114 Division, 114 Equals, 114 Greater than, 114 Greater than or equal to, 114 Integer division, 114 Less than, 114 Less than or equal to, 114 limiting gueries, 114 logical, 114 Modular division, 114 Multiplication, 114 NOT, 114 Not equal to, 114 OR, 114 Subtraction, 114 XOR, 114 Option button, 97 Option Group control, 97 orderina grouping levels (reports), 140 OR operator, 114 Outlook 2010 sending data collection e-mail messages, 218-220

P

Page break control, 97 Page Footer section (reports), 138 Page Header section (reports), 138 parameter queries, 104 creating, 116 Password input mask, 56 passwords, 222 pasting objects, 190 text, 75–76 Percent Style button, 178 Phone Number input mask, 56 pictures. See also images forms adding, 162-163 reports adding, 162-163 tilina, 169 PivotCharts, 248, 249 creating, 258-260 **PivotChart Wizard** creating PivotCharts, 258-260 pivoting, 248 PivotTable Field List box, 252 PivotTables, 248, 249 creating, 247, 250-251 fields, 250 adding, 252-253 filtering, 255 organizing, 254-255 removing, 252-253 filtering, 255 formatting, 257 names, 251 organizing data, 254-255 PowerPoint 2010, 185 previewing charts, 175 primary key Cascade Delete Related Records check box, 46 Cascade Update Related Fields check box. 46 creating tables, 27 deletina, 48 Hide key column check box, 63 indexing field values, 60 multiple-field, 39 names, 45 setting, 39

primary key field typing data in fields, 35 printing mailing labels, 143 processing data collection e-mail messages, 220 ProductID field, 27 properties controls, 96 Control Source, 137 fields. 47 editing, 52-53 viewing, 52-53 objects, 146 report controls modifying, 136 Resizing, 171 Properties box formatting PivotTables, 257 Property Sheet task pane hiding, 91

Q

queries action, 105–106 adding fields to, 111 adding tables, 110 adding to fields, 106 calculating values, 115 creating, 103 crosstab, 123–124 Find Unmatched Records, 119–120 in Deisgn view, 112 Make-Table, 121 Query Wizard, 106–109 Summary queries, 108 Update, 122

criteria limiting records, 113, 114 crosstab, 104, 105 data analysis (Excel 2010), 214-215 definition. 103 displaying results, 105, 126 editina in Design view, 110–112 exporting to text files, 206-207 Find Duplicate creating, 117, 118 Make-Table, 121 finding field values, 125-126 opening, 110 parameter, 104 creating, 116 PivotTables, 247 adding fields, 252-253 creating, 250-251 filtering, 255 formatting, 257 names, 251 organizing data, 254–255 removing fields, 252-253 select, 104 parameter, 104 Summary creating, 109 writing results to new tables, 121 Query Wizard creating queries, 106-109 **Quick Access Toolbar** adding commands to, 236-237 customizina, 7 displaying, 236 moving, 237 removing commands from, 237

R

records. See also fields filtering, 82-85 by contents of multiple columns, 85 by forms, 83 finding unmatched records, 119-120 limiting queries with criteria, 113, 114 locking, 224-225 reports aroupina, 139-140 updating values with gueries, 122 Rectangle control, 97 referential integrity, 45 regular databases, 7 relationships Create Relationship Wizard, 38 creating, 44-45 many-to-many, 43 one-to-many, 42 creating subreports, 141 subworksheets, 80-81 referential integrity, 45 Relationships window deleting tables from, 44 removing. See deleting; See also deleting commands from Quick Access Toolbar, 237 fields from Selected Fields pane, 129 fields from Selected Fields box, 89 filters, 84 Office Clipboard items, 76 PivotTable fields, 252-253 tables from design grid, 112 repeating pictures, 169 Replace Text As You Type check box, 73

replacing text. 70-71 Report Footer section (reports), 138 Report Header section (reports), 138 reports calculating values, 137-138 compared to forms, 127 conditional formats, 164-165 data bar, 165 conditional formatting, 9 controls. 152-155 adding, 135-136 aligning, 155 colors, 152 deleting, 135-136 distributing horizontally, 153 distributing vertically, 154 lines, 156-157 modifying properties, 136 selecting multiple controls, 153 shapes, 156-157 special effects, 152 creating Application Parts, 38 in Design view, 132 summary reports, 130-131 with Report Wizard, 128–129 fields adding, 134 aridlines, 158–159 changing appearance, 159 images aligning, 167–168 height, 170-171 inserting charts (Excel) into, 192–193 inserting worksheets (Excel 2010) into, 192-193 modifying, 133-134 navigation forms, 8

obiects copving, 189 embedding, 186-191 linking, 186–191 manipulating, 189-191 movina, 190 pasting, 190 saving as Web files, 212-213 sizing, 191 Office themes, 145 opening, 133–134 pictures adding, 162-163 tiling, 169 records arouping, 139-140 rows coloring alternate rows, 160 Totals row, 161 sending data collection e-mail messages, 218-220 subforms creating, 141 subreports creating, 141 summary creating, 130-131 text formatting, 146-147 themes applying, 148 combining elements into existing themes, 149 creating, 150, 151 selecting, 148 Report Wizard creating reports, 128-129 required fields data entry, 58

resizing. See sizing Resizing property, 171 restorina Ribbon configuration, 238 Ribbon, 5 commands adding, 238 renaming, 241 reordering, 239 customizina, 7 customizing interface, 238-242 displaying hidden elements, 242 hiding elements, 241 naming elements, 241 restoring install configuration, 238 tabs adding groups to, 240 creating, 240 rows forms coloring alternate rows, 160 height, 79 reports coloring alternate rows, 160 Totals row, 161 rules AutoCorrect Options, 244

5

Save Import Steps check box, 40 saving databases, 30 selecting folders to save to, 31 imports, 40 navigation forms, 228 objects as Web files, 212–213 Search Office.com For Templates box, 32 security, 221, 222-224 encrypting databases, 222-224 locking records, 224-225 passwords, 222 Selected Fields box removing fields from, 89 Selected Fields pane, 129 selecting controls multiple controls, 153 text, 75 themes, 148 select queries, 104 parameter, 104 writing results to new tables, 121 settings managing in Backstage view, 6 shapes controls, 156-157 simple forms creating, 88 size charts, 177 sizina images, 170-171 objects, 191 smalled values (fields) finding with gueries, 126 smart tags AutoCorrect Options, 73 sources changing image sources, 166 special effects Chiseled, 153 Etched, 153 forms, 152 reports, 152

spelling errors changing AutoCorrect Options, 243-245 lookup fields, 62 splitting forms, 101 Start Of Field option, 70, 71 Start Searching button, 32 startup options setting, 230-233 display options, 233 forms, 232 hiding menus, 231 styles charts, 177 subforms creating, 99-100, 141 help, 99 views, 100 Subform/Subreport control, 97 Subform Wizard, 99 subreports creating, 141 Subtraction operator, 114 subworksheets closina, 80 creating, 81 opening, 80 summary functions (Excel 2010), 214-215 Summary gueries creating, 108, 109 summary reports creating, 130-131 SupplierID field, 27 symbols customizing fields, 55 editing input masks, 57

Т

tables, 3 adding to gueries, 110 backups, 48 columns copying, 78 inserting into tables, 77 modifying, 77–78 names, 78 width, 79 copying from other databases, 40-43 creating, 47 Application Parts, 38 by typing, 35 foreign keys, 27 in Design view, 33-34 primary key, 27, 39 single objects, 26 templates, 36-37, 37 data analysis (Excel 2010), 214-215 data entry AutoCorrect, 72-74 deletina from Relationships window, 44 design many-to-many relationships, 43 exporting to text files, 206-207 fields. 3 adding, 49 adding from Add & Delete group, 36 adding to forms, 90, 94 adding to gueries, 106, 111 adding with Field Templates task pane, 25 adding with More Fields button, 36 - 37append-only memo fields, 66

arranging, 49 assigning data types, 50 assigning required fields, 58 attachment, 67 AutoNumber, 39 calculated, 137-138 changing properties, 52-53 creating lookup fields, 62-65 data types. See data types deleting, 48 descriptions. 33-35 displaving, 94 Expression Builder, 53 foreign keys, 45 formatting, 54-55 Hide key column check box, 63 indexing values, 60 input masks, 47 lookup lists, 47 memo, 50, 51 primary key, 27, 39, 45 properties, 47 removing from Selected Fields pane, 129 selecting for calculations, 115 text, 51 typing data, 35 validating data entry, 61 viewing properties, 52–53 forms adding controls, 95-97 adding data picker controls, 98 adding fields, 94 creating in Design view, 90, 91 definition, 87 deleting controls, 95-97 modifying, 93, 94 simple forms, 88 splitting, 101

subforms, 99-100 with Form Wizard, 89 importing, 194-195 linking, 196 PivotTables, 248, 249 adding fields, 252-253 creating, 247, 250-251 fields, 250 filtering, 255 formatting, 257 names, 251 organizing data, 254-255 removing fields, 252-253 primary key, 27 primary key field typing data in fields, 35 records filterina, 82–85 referential integrity, 45 relationships creating, 44-45 many-to-many, 43 one-to-many, 42 removing from design grid, 112 rows height, 79 structures, 25 subworksheets closing, 80 creating, 81 opening, 80 text copying, 75-76 deletina, 75 editing, 75-76 finding, 70-71 inserting, 75–76 pasting, 75–76 replacing, 70–71

tables, text (continued) selecting, 75 undoing operations, 75 updating values with gueries, 122 writing guery results to, 121 Tab page control, 97 tabs customizing, 7 External Data, 40 File, 5 file management tasks, 6 navigation forms, 228 Ribbon adding groups to, 240 creating, 240 templates, 5 creating databases, 7 creating tables, 36-37 databases, 31–32 finding online, 32 text copying, 75-76 deleting, 75 editing, 75-76 finding, 70-71 forms formatting, 146-147 inserting into tables, 75-76 pasting, 75–76 replacing, 70-71 reports formatting, 146-147 selecting, 75 undoing operations, 75 Text box control, 97 Text data type, 51, 56 text files exporting data to, 206-207 importing data into databases, 202-203 text strings criteria, 113 textures, 169 themes, 5, 145, 147 applying, 148 colors, 147 combining elements into existing themes, 149 creating, 147, 150-151 deleting, 149 formatting database objects, 8 forms, 89 applying, 148 combining elements into existing themes, 149 creating, 150, 151 selecting, 148 reports applying, 148 combining elements into existing themes, 149 creating, 150, 151 selecting, 148 selecting, 148 tilina pictures, 169 titles chart axes, 179 Toggle button, 97 toggling filters, 256 Totals row adding to reports, 161 turning on filters, 256 gridlines, 158-159 typing changing AutoCorrect Options, 243-245 creating tables, 35

U

Unbound object frame control, 97 undoing operations, 75 Update queries creating, 122 user interface (Ribbon) customizing, 7

V

validation data entry, 61 Validation Rule box, 61 validation rules Expression Builder, 53 viewina field properties, 52-53 Northwind sample database, 28 objects, 146 views Backstage, 2, 5 managing files, 6 managing settings, 6 Datasheet, 48, 69, 91 Design, 48 adding pictures to reports/forms, 162-163 charts, 175 creating forms in, 90, 91 creating queries, 112 creating reports, 132 creating tables in, 33-34 editing queries, 110-112 lines, 157 modifying forms, 93 Office themes, 147 Form, charts, 175 subforms, 100

W

Web Browser control, 97 Web databases, 7 Web files saving objects as, 212-213 Web pages creating hyperlinks to, 198 hyperlinks, 197–199 Web sites Office.com, 31 finding templates online, 32 Whole Field option, 70, 71 width columns, 79 images, 170-171 wizards adding controls to forms, 95 Create Relationship, 38 Form Wizard creating forms, 89

Import Spreadsheet, 201 Input Mask, 57 Label creating mailing labels, 142-143 line breaks, 143 PivotChart creating PivotCharts, 258-260 **Query Wizard** creating queries, 106-109 Report creating reports, 128-129 Subform Wizard, 99 Word 2010, 185 publishing data to, 216-217 workbooks (Excel 2010) importing data into databases, 200-201 worksheets (Excel 2010) importing data into databases, 200-201 inserting into databases, 192-193

X

XML files exporting data to, 210–211 importing data into databases, 204–205 XOR operator, 114

Y

Yes/No data type, 51

Ζ

zero-length strings disallowing, 58

About the Author

Curtis D. Frye is the author of *Microsoft Office Excel 2007 Step by Step*, *Microsoft Excel Version 2007 Plain & Simple*, several books on Microsoft Access, and numerous online training courses. He is a coauthor of *Microsoft Office Excel 2003 Programming Inside Out*.