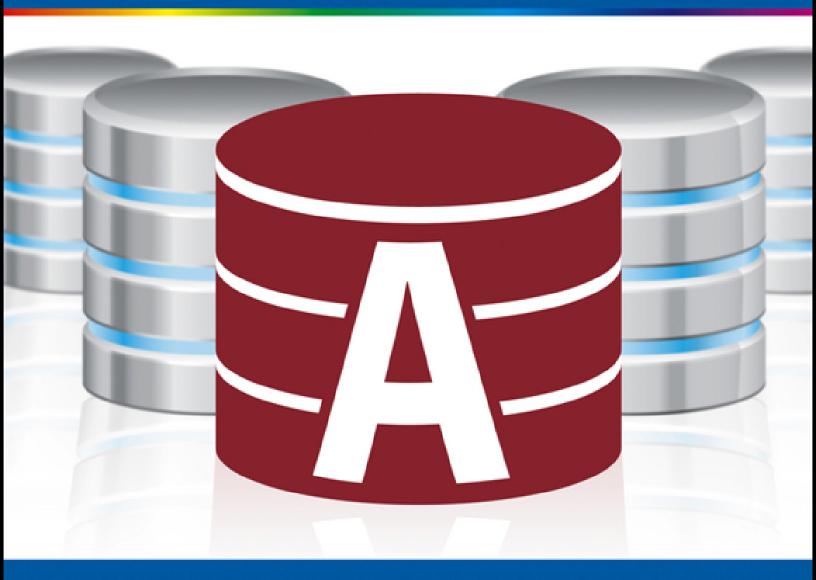


Microsoft®

Access 2013

The Fast and Easy Way to Learn



Paul McFedries

Teach Yourself VISUALLY™ Access® 2013

Table of Contents

An Introduction to Access

Start and Exit Access

Create a Blank Database

Create a Database by Using a Template

Open a Database

Close a Database

Understanding the Access Interface

Customize the Quick Access Toolbar

Customize the Ribbon

Change the Navigation Pane View

Open and Close an Object

Change an Object's View

Chapter 2: Working with Tables

Plan Effective Tables

Create a Table in the Datasheet View

Save a Table

Create a Table in the Design View

Open a Table in the Design View

Rearrange Fields

Insert and Delete Fields

Understanding Data Types

Change a Field's Data Type

Understanding Primary and Composite Keys

Set the Primary or Composite Key

Rename a Table

Delete a Table

Copy a Table

Chapter 3: Entering and Editing Data

Enter New Records

Navigate between Records

Edit Records

Attach Files to a Record

Open, Save, and Remove File Attachments

Insert an OLE Object

Open, Edit, and Remove OLE Objects

Enter Data in a Multivalued Field

Select Records

Delete Records

Sort Records

Resize Datasheet Columns and Rows

Print a Datasheet or Form

Chapter 4: Working with Fields

<u>Understanding Field Properties</u>

Understanding Field Sizes

Change a Field Size

Set a Field Caption

Set a Field's Format

Set a Default Value

Make a Field Required

Index a Field

Align Data within a Field

Create an Input Mask

Create a Validation Rule

Create a Record-Level Validation Rule

<u>Chapter 5: Working with Relationships</u>

Understanding Relationships

Create a Relationship between Two Tables

Edit a Relationship

Remove a Relationship

Arrange the Relationships Window

Print a Relationship Report

View Object Dependencies

Document the Database

<u>Understanding Lookups</u>

Create a Table for Use As a Field Lookup

Create a Field Lookup Based on a Table

Create a Field Lookup with Values That You Specify

Set Up a Multivalued Field

<u>Chapter 6: Finding and Filtering Data</u>

Understanding Find and Replace

Find Data

Replace Data

Filter to Show Only Blank or Nonblank Entries

Filter by Selection

Filter for Multiple Values

Using Text Filters

Filter by Form

Save a Filter As a Query

Chapter 7: Creating Simple Queries

Understanding Queries

Create a Query with the Simple Query Wizard

Start a New Query in the Query Design View

Insert, Arrange, and Remove Query Fields

Set Field Sorting

Add an Alias to a Query Field

Understanding Criteria

Filter a Query for a Specific Value

Specify a Range of Values

Specify a List of Values

<u>Hide a</u>	Field	in t	:he	Query	<u>/ Resu</u>	lts
---------------	-------	------	-----	-------	---------------	-----

Create Compound Criteria

Limit the Records Returned

Chapter 8: Creating Complex Queries

Understanding Summary Queries

Create a Summary Query with the Simple Query Wizard

Create a Summary Query in the Query Design View

Understanding Calculated Fields

Create a Calculated Field

Understanding Action Queries

Run a Make Table Query

Run a Delete Query

Run an Append Query

Run an Update Query

Prompt the User for a Parameter

<u>Understanding Parameter Syntax</u>

Chapter 9: Creating Forms

<u>Understanding Forms</u>

Create and Save a Form

Create a Form with the Form Wizard

Create a Form in the Layout View

Create a Form in the Design View

Delete a Field from the Design View

Arrange Fields on a Form

Group Fields Together

Define the Tab Order on a Form

Chapter 10: Editing Forms

Display the Header and Footer

Resize Sections of a Form

Select Sections of a Form

Add a Form Title

Apply a Theme

Browse for a Theme to Apply

Apply a Font Theme or Color Theme

Create a Custom Font Theme

Create a Custom Color Theme

Create a Custom Theme

Adjust Internal Margins and Padding

Add a Label

Format Label Text

Change the Background Color

Add a Background Image

Add a Hyperlink

Add a Tabbed Section

Insert a Logo or an Image

Set Conditional Formatting

Chapter 11: Creating Reports

Understanding Report Views

Create a Simple Report

Apply a Theme to a Report

Preview and Print a Report

Create a Report with the Report Wizard

Create a Report in the Layout View

Set the Page Size and Orientation

Change the Report Layout Type

Set Page Margins

Set Control Margins and Padding

Format Report Text

Size and Align Report Fields

<u>Insert a Page-Numbering Code</u>

Chapter 12: Grouping and Sorting Data

Understanding Grouping and Summarizing

Group Report Results

Group a Numeric Field by Intervals

Group a Date Field

Group Records Using an Expression

Sort Report Results

Count Records

Add an Aggregate Function

Hide the Group Header and Footer

Keep a Group Together on a Page

Change the Grouping or Sorting Priority

Remove a Grouping or Sorting

Chapter 13: Creating Mailing Labels

Create Labels

Add a Field to an Existing Line

Add a Field to a Label As a Separate Line

Color the Label Background

Color the Label Text

Apply Font Formatting to the Label Text

Export Labels to Word

Chapter 14: Performing a Mail Merge

Start a Mail Merge

Create the Main Document in Word

Insert an Address Block

Insert a Greeting Line

Match Fields

Insert Individual Fields

Preview the Merge Results

Filter the Recipient List

Sort the Recipient List

Merge to a New Document

Merge Directly to a Printer

Save the Merge for Later Use

Chapter 15: Working with External Data

Import an Excel Worksheet

Link to an Excel Worksheet

Link to an Outlook Folder

Manage Linked Tables

Import a Table from Another Access Database

<u>Import Data from a Delimited Text File</u>

Import Data from a Web Page

Import Data from an XML File

Export Data to Excel

Export Data As HTML

Export Data to a Plain Text File

Save Import or Export Specifications

Using Saved Import or Export Specifications

Analyze Access Data Using an Excel PivotTable

Add Multiple Fields to a PivotTable Area

Move a Field to a Different PivotTable Area

Group PivotTable Values

Apply a PivotTable Filter

Chapter 16: Maintaining a Database

Set a Trusted Location

Save in an Earlier Version Format

Convert to the Access 2007-2013 Format

Back Up a Database

Analyze Database Performance

Compact and Repair a Database

Password-Protect a Database

Create a Switchboard

Set Switchboard Startup Options





by Paul McFedries



Teach Yourself VISUALLY™ Access® 2013

Published by **John Wiley & Sons, Inc.** 10475 Crosspoint Boulevard Indianapolis, IN 46256

www.wiley.com

Published simultaneously in Canada

Copyright © 2013 by John Wiley & Sons, Inc., Indianapolis, Indiana

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978)750-8400, fax (978)646-8600. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201)748-6011, fax (201)748-6008, or online at www.wiley.com/go/permissions.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at http://booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2013932930

ISBN: 978-1-118-51770-3

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Trademark Acknowledgments

Wiley, the Wiley logo, Visual, the Visual logo, Teach Yourself VISUALLY, Read Less - Learn More and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates. Microsoft and Access are registered trademarks of Microsoft Corporation in the United States and other countries. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc. is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE

SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

FOR PURPOSES OF ILLUSTRATING THE CONCEPTS AND TECHNIQUES DESCRIBED IN THIS BOOK, THE AUTHOR HAS CREATED VARIOUS NAMES, COMPANY NAMES, MAILING, E-MAIL AND INTERNET ADDRESSES, PHONE AND FAX NUMBERS AND SIMILAR INFORMATION, ALL OF WHICH ARE FICTITIOUS. ANY RESEMBLANCE OF THESE FICTITIOUS NAMES, ADDRESSES, PHONE AND FAX NUMBERS AND SIMILAR INFORMATION TO ANY ACTUAL PERSON, COMPANY AND/OR ORGANIZATION IS UNINTENTIONAL AND PURELY COINCIDENTAL.

Contact Us

For general information on our other products and services please contact our Customer Care Department within the United States at (877)762-2974, outside the United States at (317)572-3993 or fax (317)572-4002.

For technical support, please visit www.wiley.com/techsupport.



Sales | Contact Wiley at (877) 762-2974 or fax (317) 572-4002.

Credits

Executive Editor

Jody Lefevere

Project Editor

Dana Rhodes Lesh

Technical Editor

Vince Averello

Copy Editor

Dana Rhodes Lesh

Editorial Director

Robyn Siesky

Business Manager

Amy Knies

Senior Marketing Manager

Sandy Smith

Vice President and Executive Group Publisher

Richard Swadley

Vice President and Executive Publisher

Barry Pruett

Project Coordinator

Katie Crocker

Graphics and Production Specialists

Ana Carrillo Joyce Haughey Andrea Hornberger Jennifer Mayberry

Quality Control Technician

Lauren Mandelbaum

Proofreading and Indexing

Cynthia Fields
BIM Indexing & Proofreading Services

About the Author

Paul McFedries is a full-time technical writer. Paul has been authoring computer books since 1991 and has more than 80 books to his credit. His books have sold more than four million copies worldwide. These books include the Wiley titles *Teach Yourself VISUALLY Microsoft Excel 2013, Teach Yourself VISUALLY Microsoft Windows 8, Windows 8 Visual Quick Tips, iPhone 5 Portable Genius, and iPad 4th Generation and iPad mini Portable Genius. Paul is also the proprietor of Word Spy (www.wordspy.com), a website that tracks new words and*

phrases as they enter the language. Paul invites you to drop by his personal website at www.mcfedries.com or follow him on Twitter at opening and own.mcfedries.com or follow him on Twitter at opening or opening</

Author's Acknowledgments

It goes without saying that writers focus on text, and I certainly enjoyed focusing on the text that you will read in this book. However, this book is more than just the usual collection of words and phrases. A quick thumb through the pages will show you that this book is also chock-full of images, including sharp screenshots. Those colorful images make for a beautiful book, and that beauty comes from a lot of hard work by Wiley's immensely talented group of designers and layout artists. They are all listed in the Credits section on the previous page, and I thank them for creating another gem. Of course, what you read in this book must also be accurate, logically presented, and free of errors. Ensuring all of this was an excellent group of editors that included project editor and copy editor Dana Lesh and technical editor Vince Averello. Thanks for your exceptional competence and hard work. Thanks, as well, to Wiley executive editor Jody Lefevere for asking me to write this book.

How to Use This Book

Whom This Book Is For

This book is for the reader who has never used Microsoft Access. It is also for readers who want to expand their knowledge of Access and learn about the features of the latest version.

The Conventions in This Book

Steps

This book uses a step-by-step format to guide you easily through each task. **Numbered steps** are actions you must perform; **bulleted steps** clarify a point, step, or optional feature; and **indented steps** give you the result.

2 Notes

Notes give additional information — special conditions that may occur during an operation, a situation that you want to avoid, or a cross-reference to a related area of the book.

Icons and Buttons

Icons and buttons show you exactly what you need to click to perform a step.

Tips

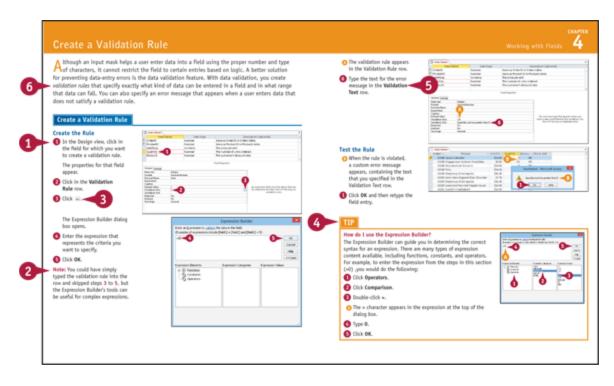
Tips offer additional information, including warnings and shortcuts.

6 Bold

Bold type shows command names or options that you must click and text or numbers you must type.

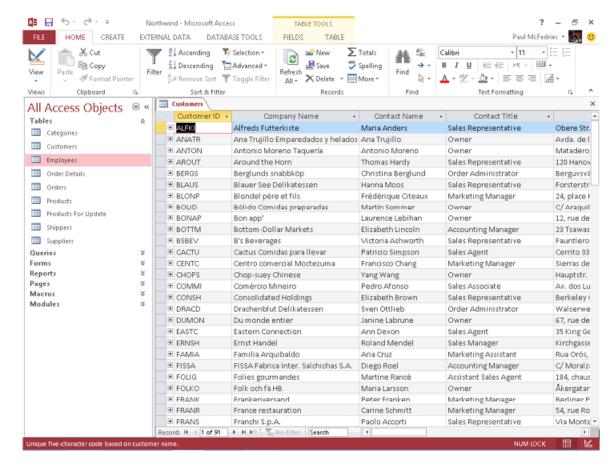
6 Italics

Italic type introduces and defines a new term.



Chapter 1: Getting Started with Access

Are you new to Microsoft Access or upgrading to the latest version of the program? This chapter introduces you to Access and to some useful database concepts. You also learn how to create and open a database as well as how to navigate through the Access interface.



An Introduction to Access

Start and Exit Access

<u>Create a Blank Database</u>

<u>Create a Database by Using a Template</u>

<u>Open a Database</u>

Close a Database

<u>Understanding the Access Interface</u>

Customize the Quick Access Toolbar

Customize the Ribbon

Change the Navigation Pane View

Open and Close an Object

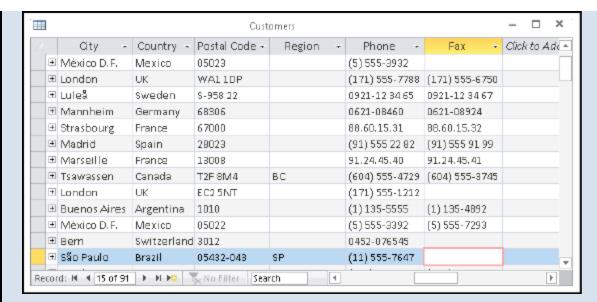
Change an Object's View

An Introduction to Access

Microsoft Access is a program for creating and working with special files called *databases*, which are designed to store collections of related information. For example, one database might store business data such as customers, invoices, and inventory, whereas another might store personal data such as contacts, movies, and household items. You can use Access to create, retrieve, and manage large or small collections of information.

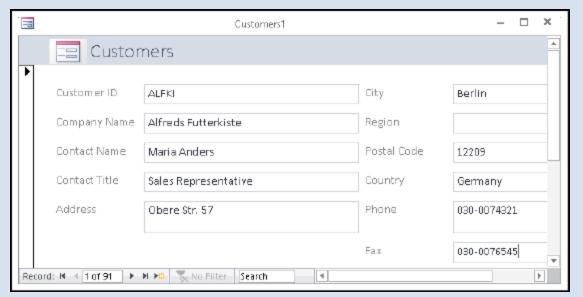
To get the most out of Access, you need to understand basic concepts such as tables, records, and fields; database objects such as datasheets and forms; and database tools such as filters, queries, and reports.

Tables, Records, and Fields



In Access, data is stored in *tables*, and each individual entry in a table is called a *record*. For example, in a Customers table, the information about each customer is a separate record. Each record is composed of one or more *fields* that contain individual pieces of data. In this example, customer fields may include Name, Address, City, State, and Zip Code.

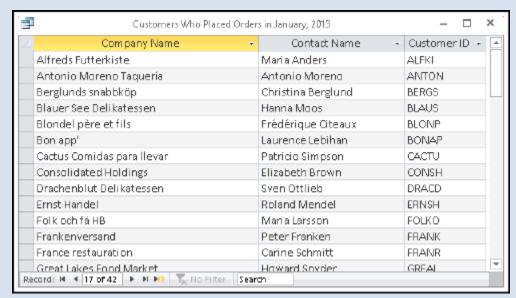
Datasheets and Forms



By default, each table appears as a spreadsheet grid called a *datasheet*. You can type directly into a

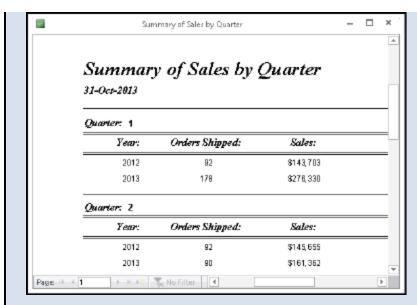
datasheet. To make data entry more convenient, some people choose to create on-screen *forms*, which are like dialog boxes that prompt for field entries. An attractively formatted form is easier and more pleasant to use to enter new records than a plain datasheet.

Filters and Queries



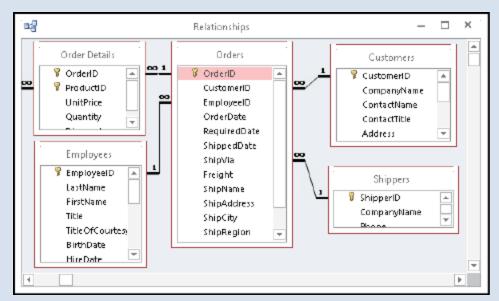
It is often useful to display a filtered view of a table. You can filter a table to show only certain records, only certain fields, or both. You can run a one-time filter, or you can create a *query*, which is like a saved filter. Queries also enable you to combine data from multiple related tables into a single datasheet of results.

Reports



Tables and query results appear in plain datasheets, which are not very attractive when printed. Reports present data from tables and queries in an attractive, customizable format — complete with titles, headers and footers, and even logos and graphics.

Relational Databases



Microsoft Access creates *relational databases* — that is, databases that can contain multiple tables with links between them. For example, a business may have a Customers table for storing customer contact information

and an Orders table for storing information about orders placed. Each customer in the Customers table has a unique ID, and each order in the Orders table references a specific customer ID.

Start and Exit Access

Before you can create or open a database file, you must first start Access. This brings the Access window onto the Windows desktop so that you can then begin using the program.

How you start Access depends on which version of Windows you are using. In this section, you learn how to start Access 2013 in Windows 8 and in Windows 7. When you are finished working with Access, you should exit the program.

Start and Exit Access

Start Access in Windows 8

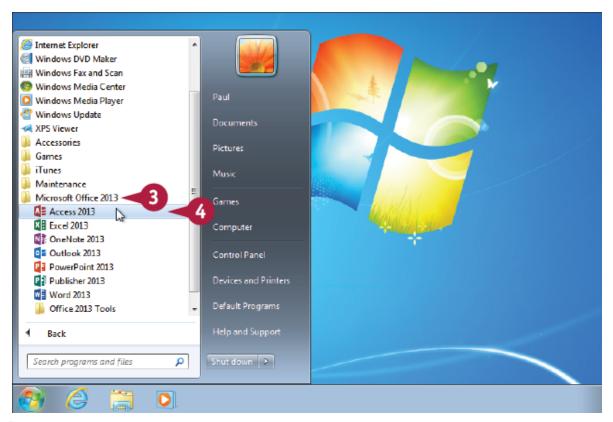


① On the Windows 8 Start screen, click **Access 2013**. The Microsoft Access window appears on the desktop.

Start Access in Windows 7



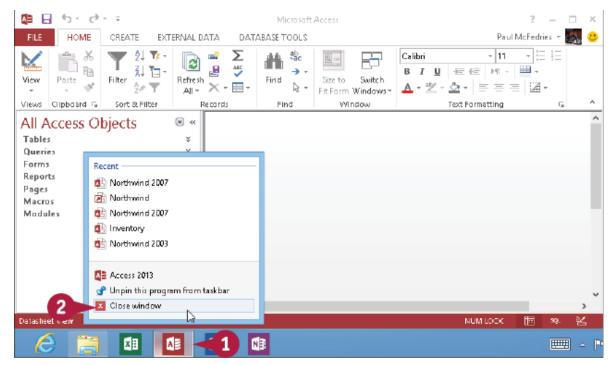
- 1 Click Start.
- Click All Programs.



- Olick Microsoft Office 2013.
- Click Access 2013.

The Microsoft Access window appears on the desktop.

Exit Access



- Right-click the Access taskbar button (
 ■).
- Click Close window.

Note: If you have two or more database files open, click **Close all windows** instead.

Access closes, returning you to your desktop view.

TIP

Are there faster methods that I can use to start Access?

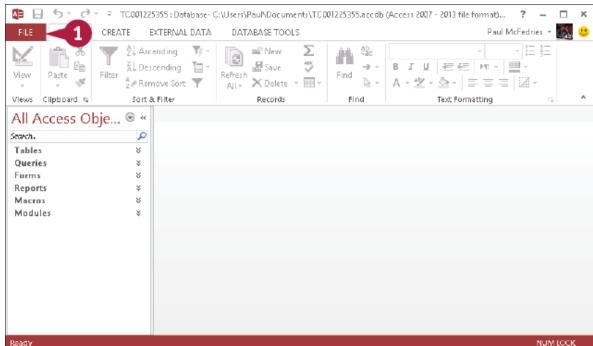
Yes. After you have used Access a few times in Windows 7, it should appear on the main Start menu in the list of your most-used programs. If so, you can click that icon to start the program. You can also force the Access icon onto the Start menu by following steps 1 to 3 in the "Start Access in Windows 7" subsection, right-clicking the Microsoft Access 2013 icon, and then clicking Pin to Start Menu. If you are using Windows 8, you can right-click the Access 2013 tile and then click Pin to Taskbar to add the Access icon to the desktop taskbar.

Create a Blank Database

The simplest way to get started with Microsoft Access is to create a blank database. A blank database contains only a single, empty table and no other database objects, such as queries, forms, or reports. A blank database provides the freedom to create exactly the objects that you want for your project.

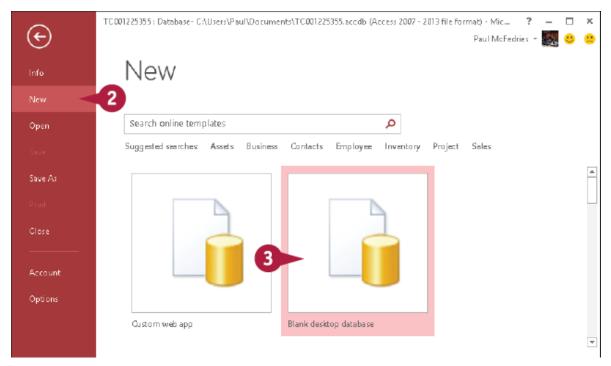
If another person or your company has provided you with a database file, you should open that file instead; see the section "Open a Database."

Create a Blank Database



1 Click File.

Note: If you have just started Access, skip to step 3. The File options appear.

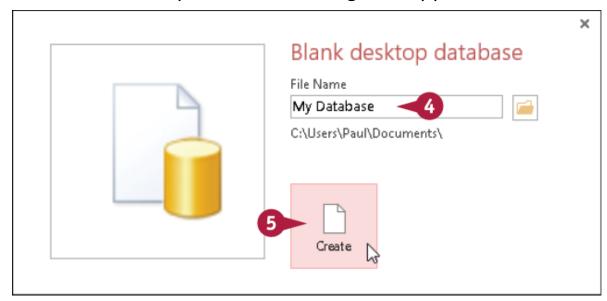


Click New.

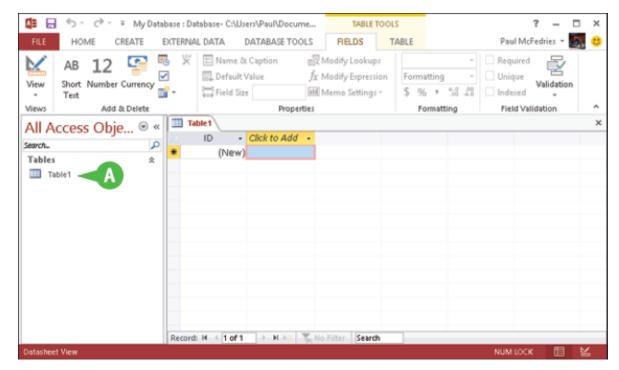
The New options appear.

Olick Blank desktop database.

The Blank Desktop Database dialog box appears.



- Type a filename for the database.
- 6 Click Create.



A A new database opens, with a new blank table started.

TIP

Are there shortcuts that I can use to create a blank database?

Yes, Access offers a couple of techniques that you can use to shorten the process of creating a blank database. First, you can quickly display the New tab by pressing — + ... Second, if you prefer to use your mouse to begin the process of creating a blank database, you can add the New command to the Quick Access Toolbar. After you have done this, you can click **New** on the Quick Access Toolbar to go directly to the New tab. See the section "Customize the Quick Access Toolbar" to learn how to add commands to this toolbar.

Create a Database by Using a Template