

# Practice Exercises

## 1 Martha's Vineyard Bookstore—Creation

One of your aunt's friends, Jennifer Frew, owns and operates a tiny bookstore during the tourist season on Martha's Vineyard. Jennifer asked you to help her after your aunt bragged that you are becoming quite the computer whiz because of this class. You believe that you can help Jennifer by creating a small database. She has stored information about the publication companies and the books that she sells in Excel spreadsheets. You, in consultation with Jennifer, determine that a third table—an author table—also is required. Your task is to design and populate the three tables, establish appropriate linkages between them, and enforce referential integrity. This project follows the same set of skills as used in Hands-On exercises 1 and 2 in this chapter. If you have problems, reread the detailed directions presented in the chapter. Refer to Figure 2.45 as you complete your work.

- a. Start Access and click **Blank Database** in the New Blank Database section of the *Getting Started with Microsoft Office Access* window. Click **Browse**, navigate to the Your Name Access Production folder, type **chap2\_pe1\_bookstore\_solution.accdb**, and click **OK**. Then click **Create** in the Blank Database section of the *Getting Started with Microsoft Office Access* window.
- b. Create a new table by entering data into what will become the Author table. Enter the following data.

Field1	Field2	Field3
11	Benchloss	Michael R.
12	Turow	Scott
13	Rice	Anne
14	King	Stephen
15	Connelly	Michael
16	Rice	Luanne

- c. Click **Save** on the Quick Access Toolbar. Type **Author** in the Save As dialog box and click **OK**.
- d. Right-click the **Author table** under All Tables in the Navigation Pane and select **Design View**. Access will automatically create a primary key; however, it is not the correct field for the primary key.
- e. Click the row selector for the second row (Field1) and click **Primary Key** in the Tools group on the Design tab.
- f. Check the properties of **Field1** to ensure that the *Indexed* property has been set to **Yes (No Duplicates)**, which is appropriate for a primary key. Select **Field1** and type **AuthorID** to rename the field, type **Author ID** as the caption, and select **Long Integer** as the field size.
- g. Rename **Field2** as **LastName**, type **Author's Last Name** as the caption, and type **20** as the field size. Rename **Field3** as **FirstName**, type **Author's First Name** as the caption, and type **15** as the field size.
- h. Click the **ID field row selector** to select the row and press **Delete**. Click **Yes**.
- i. Click **Save** on the Quick Access toolbar to save the design changes. It is safe to ignore the lost data warning because you did shorten the field sizes.
- j. Click the **External Data** tab and click **Import Excel Spreadsheet** in the Import Group to launch the Get External Data Wizard – Get External Spreadsheet Wizard. Select the **Import the source data into a new table in the current database** option, click **Browse**, and go to your Exploring Access folder. Select the **chap2\_pe1\_bookstore.xlsx** workbook and click **OK**. This workbook contains two worksheets.
- k. Select the **Publishers** worksheet. Use the **PubID** field as the primary key. Set the *Indexed Field Options* property box to **Yes (No Duplicates)**. In the next wizard screen, select the **PubID** as your primary key. Name the table **Publishers**. Do not save the import steps.

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- l. Repeat the Import Wizard to import the **Books worksheet** from the same file into the Access database as a table named **Books**. Set the *Indexed Field Options* property box for the ISBN to **Yes (No Duplicates)**. Set the **ISBN** as the primary field. Do not save the import steps.
- m. Open the **Books table** in Design view. Make sure the **PubID** field is selected, click in the *Field Size* property box and type **2**. Change the **ISBN Field size** property to **15**. Change the **Price field Format** property to **Currency**. Change the **AuthorCode field Field Size** property to **Long Integer** to create the relationship later. Click **Save** on the Quick Access toolbar to save the design changes to the **Books table**.
- n. Open the **Publishers table** in Design view. Make sure the **PubID** field is selected, click in the *Field Size* property box and type **2**, and click in the *Caption* property box and type **Publisher's ID**. For each of the following fields, click in the *Field Size* property box and type **50**: **PubName**, **PubAddress**, and **PubCity** fields. Set the *Field Size* property for **PubState** field to **2**. Change the *Pub Address* field name to **PubAddress** and change the *Pub ZIP* field name to **PubZIP** (without the spaces to be consistent with the other field names). Click **Save** on the Quick Access Toolbar to save the design changes to the **Publishers table**. Close all open tables.
- o. Click the **Database Tools** tab and click **Relationships** in the Show/Hide group. Double-click each table name to add it to the Relationship window. Click and drag the **AuthorID** field from the **Author** table to the **AuthorCode** field in the **Books** table. Click the **Enforce Referential Integrity** check box in the Create Relationships dialog box. Then click **Create** to create a one-to-many relationship between the Author and Books tables.
- p. Click and drag the **PubID** field from the **Publishers** table to the **PubID** field in the **Books** table. Click the three check boxes in the Create Relationships dialog box and click **Create** to establish a one-to-many relationship between the Publishers and Books tables.
- q. Click **Save** on the Quick Access Toolbar to save the changes to the Relationship window. Press **PrintScreen** to capture a screenshot. Nothing seems to happen because the screenshot is saved to the Clipboard. Launch Microsoft Word. Type **your name and section number** and press **Enter**. Paste the screenshot into the Word file, save the file as **chap2\_pe1\_bookstore\_solution.docx**, and print it. Close Word. The Access file should still be open.
- r. Close the Relationship window. Click the **Office Button**, select **Manage**, and then select **Back Up Database**. Name the backup **chap2\_pe1\_bookstore\_solution\_backup.accdb**. Close the database.

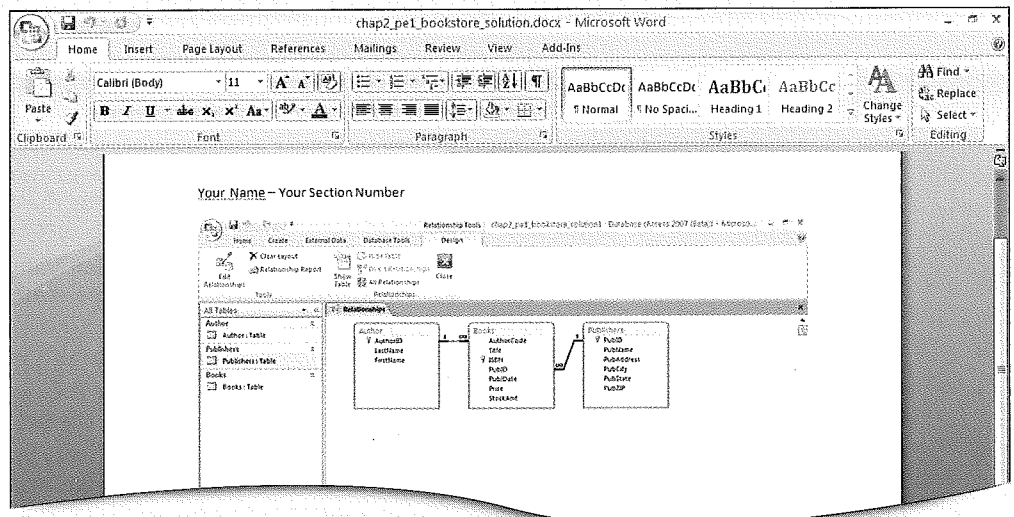


Figure 2.45 Word Screen Showing Capture of the Access Relationship Window

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## 2 Martha's Vineyard Bookstore— Querying

Your mother's friend is thrilled with the work that you have completed on the bookstore's database. She has received additional stock and asks you to update the file with the new information. Once updated she wants you to provide a printout of all of the books in stock that were published by Simon & Shuster. **You must work Exercise 1 before you can start this one.** This project follows the same set of skills as used in Hands-On exercise 3 in this chapter. If you have problems, reread the detailed directions presented in the chapter. Refer to Figure 2.46 as you complete your work.

- a. Use Windows to copy *chap2\_pe1\_bookstore\_solution.accdb*. Rename the copied database as *chap2\_pe2\_bookstore\_solution.accdb*. Open *chap2\_pe2\_bookstore\_solution*. Click **Options** in the Security Warning bar, click **Enable this content** in the Microsoft Office Security Options dialog box, and click **OK**.
- b. Double-click the **Author table** in the All Tables pane to open the table in Datasheet view. Locate the new record indicator (the one with the \* in the row selector) and click the first field. Enter data for the new record using **17** as Author ID and **your name** as the first and last names. Press **Enter**.
- c. Open the **Books table** and click the **New (blank) record command**. Type **17** in the AuthorCode field, **Computer Wisdom** in the Title field, **0-684-80415-5** in the ISBN field, **KN** in the PubID field, **2006** in the PubDate field, **23.50** in the Price field, and **75** in the StockAmt field. Press **Enter**.
- d. Click the **Create tab** and click **Query Wizard** in the Other group. Choose the **Simple Query Wizard**. From the **Author table** select the Author's **LastName** and **FirstName** fields. From the **Books table** select **Title**. Select the **PubName** field from the **Publishers table**. Name the query **Your Name Publishers, Books, and Authors**.
- e. Open the query in Design view. Click in the criteria row of the PubName field. Type **Knopf** to create a criterion to limit the output to only books published by **Knopf**. Click **Run** in the Results group on the Design tab.
- f. Return to Design view. Click the Sort row in the **LastName** field and select **Ascending**.
- g. Move your mouse over the top of the **Title** field until the mouse pointer shape changes to a bold down arrow and then click. With the Title column selected, click and drag it to the left of the **LastName** field. Click the Sort row in the **Title** field and select **Ascending**. You will see sort commands on both the Title and LastName fields.
- h. Click **Run** in the Results group on the Design tab. Save the query. Click the **Office Button**, position the mouse pointer over **Print**, and select **Quick Print**.
- i. Click the **Office Button**, select **Manage**, and then select **Compact and Repair Database**.

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