Instructor’s Manual Materials to Accompany

EXPLORING MICROSOFT® OFFICE 2013, VOLUME 1

## ACCESS CHAPTER 1: Introduction to Access: Finding Your Way Through an Access Database

### Available Instructor Resources

|  |  |  |
| --- | --- | --- |
| **Resource** | **File Name** | **Found** |
| **Student Data Files** | various | Online Instructor Resource Center |
| **Solution Files** | various | Online Instructor Resource Center |
| **Answer Keys** |  | Online Instructor Resource Center |
| Matching | a01\_answerkey\_match |
| Multiple Choice | a01\_answerkey\_mc |  |
| Concepts Checks | a01\_answerkey\_concepts |  |
| **Scorecards** | a01b1Tips\_scorecard | Online Instructor Resource Center |
| **Scoring Rubrics** | a01b1Tips\_rubric | Online Instructor Resource Center |
| **Annotated Solution File** | a01b1Tips\_annsolution | Online Instructor Resource Center |
| Scripted Lecture (Script) | a01\_script | Online Instructor Resource Center |
| Scripted Lecture Solution | a01\_script\_solution |
| Scripted Lecture Data | a01\_script\_data |  |
| **PowerPoint Presentation** | a01\_powerpoints | Online Instructor Resource Center |
| **Testbank** | a01\_testbank | Online Instructor Resource Center |
| **Instructor's Manual (lesson plans incl.)** | a01\_instructormanual | Online Instructor Resource Center |
| **Assignment Sheet** | a01\_assignsheet | Online Instructor Resource Center |
| **Prepared Exam (Chapter & Application)** |  | Online Instructor Resource Center |
| Prepared Exam-Chapter instruction | a01\_exam\_chap\_instruction |
| Prepared Exam-Chapter solution | a01\_exam\_chap\_solution |
| Prepared Exam-Chapter data | a01\_exam\_chap\_data |
| Prepared Exam-Chapter Annotated solution | a01\_exam\_chap\_annsolution |
| Prepared Exam-Chapter scorecard | a01\_exam\_chap\_scorecard |
| Prepared Exam-Application instruction | a01\_cumexam\_instruction |  |
| Prepared Exam-Application solution | a01\_cumexam\_solution |  |
| Prepared Exam-Application data | a01\_cumexam\_app\_data |  |
| Prepared Exam-Application Annotated solution | a01\_cumexam\_annsolution |  |
| Prepared Exam-Application scorecard | a01\_cumexam\_scorecard |  |
| **File Guide** | a01\_file\_guide | Online Instructor Resource Center |
| **Instructor Resource Card** | a01\_ircard | Online Instructor Resource Center |
| **Objective Map** | a01\_objectivesmap | Online Instructor Resource Center |
| **Online Chapter Review** | a01\_chapt\_checklist | Companion Website for Students |
| **Grader Project** |  |  |
| Grader-instruction | a01\_grader\_instruction | Online Instructor Resource Center |
| Grader-solution | a01\_grader\_solution |
| Grader-data | a01\_grader\_data |
| Grader-annotated solution | a01\_grader\_annsolution |  |
| Grader-scorecard | a01\_grader\_scorecard |  |
| **Additional Projects (Practice & Mid-Level)** |  | Online Instructor Resource Center |
| Additional Proj-Practice instruction | a01\_p\_addproject\_instruction |
| Additional Proj- Practice solutions | a01\_p\_addproject\_solution |
| Additional Proj-Practice data | a01\_p\_addproject\_data |
| Additional Proj-Practice annotated solution | a01\_p\_addproject\_annsolution |
| Additional Proj-Practice scorecard | a01\_p\_addproject\_scorecard |
| Additional Proj-Mid-Level instruction | a01\_ml\_addproject\_instruction |  |
| Additional Proj-Mid-Level solutions | a01\_ml\_addproject\_solution |
| Additional Proj-Mid-Level data | a01\_ml\_addproject\_data |
| Additional Proj-Mid-Level annotated solution | a01\_ml\_addproject\_annsolution |  |
| Additional Proj-Mid Level scorecard | a01\_ml\_addproject\_scorecard |  |

### CHAPTER OBJECTIVES

#### When students have finished reading this chapter, they will be able to:

* Understand database fundamentals
* Use an existing database
* Sort table data on one or multiple fields
* Create, modify, and remove filters
* Know when to use Access or Excel to manage data
* Understand relational power
* Create a database

### CHAPTER OVERVIEW

#### The students will be introduced to the basic concepts that provide the foundation for understanding databases and Microsoft Access.

#### The major sections in this chapter are

1. **Databases Are Everywhere!** The basic concepts and terminology for database use are presented.
2. **Sorts and Filters.** Access provides many tools that can be used to change the order of how data is displayed.
3. **Access Versus Excel, and Relational Databases.** Both Access and Excel offer powerful functionality that allows you to work with information you need to analyze. An essential skill in becoming a proficient Office user is learning which application to use to accomplish a task in the optimal manner.
4. **Access Database Creation.** Creating a database is a skill that will be developed.

### CLASS RUN-DOWN

1. Have students turn in homework assignments.
2. Talk about the material in the chapter using the discussion questions given in a later section.
3. Use the PowerPoint presentation to help students understand chapter content.
4. Demonstrate Access 2013.
5. Run through Scripted Lectures for the chapter. Give special attention to areas where students might be challenged.
6. Use myitlab for in-class work or to go over homework.
7. Have students complete the Capstone Exercise for Access Chapter 1.
8. Give students Homework Handout for next class period.

### LEARNING OBJECTIVES

#### At the end of this lesson students should be able to:

* Navigate among the objects in an Access database.
* Understand the difference between working in storage and memory.
* Practice good database file management.
* Back up, compact, and repair Access files.
* Create filters.
* Sort table data on one or more fields.
* Know when to use Access or Excel to manage data.
* Use the Relationships window.
* Understand relational power.
* Create an Access table.

### KEY TERMS

**AutoNumber—**A data type where a number is generated by Access and is automatically incremented each time a record is added.

**Backup—**Creates a duplicate copy of the database.

**Compact & Repair—**A utility that reduces the size of the database because databases have a tendency to expand with everyday use and could become corrupt.

**Comparison operator—**A comparison method that allows you to evaluate the relationship between two quantities and determines which one is greater than the other.

**Criterion** (or criteria, plural)**—**A number, a text phrase, or an expression used to select records from a table.

**Custom Web app—**Method of creation of a database that enables you to create a database that you can build and then use and share with others through the Web.

**Database**—Collection of data organized as meaningful information that can be accessed, managed, stored, queried, sorted, and reported.

**Database management system (DBMS)—**Software system that provides the tools needed to create, maintain, and use a database.

**Datasheet view**—Grid containing fields (columns) and records (rows), similar to the appearance of an Excel spreadsheet. You can view, add, edit, and delete records in Datasheet view.

**Design view**—Detailed view of the table's structure where you can create and modify a table’s design by specifying the fields it will contain, the type of data that will be stored in the fields, and the properties for each field.

**Enforce referential integrity**—One of the options in setting a table relationship that ensures that data cannot be entered into a related table unless it first exists in the primary table. It also prohibits users from deleting a record in one table if it has records in related tables.

**Field**—The smallest data element contained in a table. In Datasheet view, a field is a column.

**Filter**—Aprocess that allows you to display a subset of records based on specified criteria.

**Filter by Form**—A more versatile method of selecting data because it allows you to display records based on multiple criteria, which allows the user to apply AND and OR conditions. It also allows you to use a comparison operator.

**Filter by Selection**—A type of filter that allows you to display records with values that equal a preselected single criterion for a field.

**Foreign key—**A field in one table that is also the primary key of another table.

**Form**—An object that enables you to enter, modify, or delete table data. You can limit the user’s view to one record at a time.

**Join lines—**Tool that allows you to create a relationship between two tables using a common field. You have three options available to manage the relationship: Enforce referential integrity, Cascade update related fields, and Cascade delete related records.

**Macro**—An object that is a stored series of commands that carry out an action. Generally used by power users of Access.

**Module**—An object that is similar to a macro and adds functionality to a database, but modules are written using the VBA (Visual Basic for Applications) programming language.

**Navigation Pane**—Organizes and lists the database objects in an Access file.

**Normalization**—The practice in effective database design whereby data is grouped into the correct tables.

**Objects**—The main components that are created and used to make the database function. There are six object types: tables, queries, forms, reports, macros, and modules.

**Primary key**—The field (or combination of fields) that uniquely identifies each record in a table and prevents the occurrence of duplicate records.

**Query**—A question that you ask about the data in the tables of your database. The results are in Datasheet view and can be used to display selected records and/or selected fields that meet a certain criterion.

**Record**—A complete set of all the fields about one person, place, event, or concept. In Datasheet view, a record is a row.

**Relational database management system (RDBMS)** —Access allows you to manage groups of data (tables) and then set rules between tables (relationships). This enables you to extract information from multiple tables into a single query or report. When relational databases are designed properly, users can easily combine data from multiple tables to create queries, forms, and reports.

**Relationship**—A connection between two tables using a common field. Users can combine data from multiple tables in queries, forms, and reports. Relationships are the reason Access is referred to as a relational database.

**Report**—An output format that contains professionally formatted information from underlying tables or queries.

**Sort**—A process that allows you to list records in a specific sequence.

**Sort Ascending**—Sorts a list of text data in alphabetical order or a numeric list in lowest to highest order.

**Sort Descending**—Sorts a list of text data in reverse alphabetical order or a numeric list in highest to lowest order.

**Table**—A collection of related records. Access allows the creation of relationships that connect multiple tables.

**Template—**A predefined database that includes professionally designed tables, forms, reports, and other objects that you can use to jumpstart the creation of your database.

### DISCUSSION QUESTIONS

* What is a database? Why are databases important? Why is a database useful? What are the advantages of a database?
* What is the difference between working in storage and working in memory? What type of memory does Access work from?
* What are some good file management techniques and why is it important to use them?
* What are some factors you should consider when deciding whether to use Access or Excel to manage data?
* Describe the power of a relational database.

### WHEN USING SCRIPTED LECTURE IN CLASS, DEMONSTRATE HOW TO:

* Copy an Access File
* Rename an Access File and Open an Access File
* Edit a Record
* Navigate an Access Form and Add Records
* Delete a Record
* Compact, Repair, and Back Up the Database
* Create Filters
* Apply Filter by Selection
* Apply Filter by Form
* Sort a Table
* Use the Relationships Window to Establish a Relationship Between Tables
* Filter a Table
* Use Filter by Form with a Comparison Operator and Reapply a Saved Filter
* Filter a Report
* Remove an Advanced Filter
* Create a Database

### CONNECTIONS PRACTICAL PROJECTS AND APPLICATIONS

* Use a database for contact information for the students in a student organization.
* Use a database to send invitations for a fundraising event.
* Use a database to print a report of all students in your major.
* Use a database to manage inventory for a business.

### TEACHING NOTES

#### Databases Are Everywhere!

*A database is a collection of data organized as meaningful information that can be accessed, managed, stored, queried, sorted, and reported.*

1. **Understanding Database Fundamentals**
   * A database is a collection of data organized as meaningful information that can be accessed, managed, stored, queried, sorted, and reported.
   * Organize information in a database and recognize Access objects: An Access database is a structured collection of six types of objects: tables, forms, queries, reports, macros, and modules.
   * The foundation of a database is its tables, the objects in which data is stored. Each table in the database is composed of records, and each record is in turn made up of fields.
   * **Teaching Tips**: A pencil symbol to the left of the record number indicates you are editing the record. Access automatically saves changes when you move to the next record. An asterisk in the row selector box signifies a blank record.
   * The primary key in a table is the field (or combination of fields) that makes every record in a table unique.

* **Teaching Tips**: Examine the Access interface: Objects are organized and listed in the Navigation Pane. Access also uses a Tabbed Documents interface in which each object that is open has its own tab.
* **Teaching Tips**: Explore Access views: The Datasheet view enables the user to view, add, edit, and delete records, whereas the Design view is used to create and modify a table’s design by specifying the fields it will contain, the fields’ data types, and their associated properties.
* **Teaching Tips**: Open an Access file and work with Content Security: When a database is opened from a location that has not been designated as a trusted location or that does not have a digital signature from a publisher you can trust, Access displays a message bar with a security warning. Click Enable Content if you trust the database’s source.
* **Teaching Tips**: The way Access performs its save function is different from the other Microsoft Office applications. Word, Excel, and PowerPoint all work primarily from memory, where your work is not automatically saved to your storage location. You must save your work. In contrast, Access works primarily from storage. As you enter and update the data in an Access database, the changes are automatically saved to the storage location you specified when you saved the database. If a power failure occurs, you will lose only the changes to the record that you are currently editing. When you make a change to a record’s content in an Access table Access saves your changes as soon as you move the insertion point to a different record. However, you are required to save after you modify the design of a table, a query, a form, or a report.
* **Teaching Tips**: Unlike other Office programs that enable multiple Undo steps, you cannot use Undo to reverse multiple edits in Access. With an Access database file, several users can work in the same file at the same time. Databases are often located on company servers, making it easy to have multiple users working in the same database at the same time. As long as multiple users do not attempt to change the same record at the same time, Access will let these users access the database simultaneously.

1. Using an Existing Database

* Add, edit, and delete records: A pencil icon displays in the row selector box to indicate when you are in editing mode.
* Moving to another record or clicking Save on the Quick Access Toolbar saves the changes.
* To add a new record, click New (blank) record on the navigation bar. To delete a record, click the row selector and click Delete in the Records group on the Home tab.
* Save As, Compact and Repair, and Back Up Access files: Compact and Repair reduces the size of the database, and Back Up creates a duplicate copy of the database.
* **Teaching Tips:** Save Database As enables you to select whether you want to save the database in the default database format (Access 2007–2013 file format), in one of the earlier Access formats, or as a template. Save Object As enables you to make a copy of the current Access object or publish a copy of the object as a PDF or XPS file. A PDF or XPS file looks the same on most computers because these file types preserve the object’s formatting. PDF and XPS files also have a small file size. You can also click Save on the Quick Access Toolbar to save an active object—clicking Save on the Quick Access Toolbar does not save the database.
* **Teaching Tips:** You should compact your database every day. You can have Access compact the open database each time you close it by using the Compact and Close option. To use this option, click File to open the Backstage view. Click Options and click Current Database. In the Options for the current database pane, click the Compact on Close check box under Application Options. Click OK.
* **Teaching Tips:** To back up files, click the File tab, click Save & Publish from the list of options, double-click Back Up Database from the list of Share options, and then designate the folder location and file name.

#### Sorts and Filters

*Access provides you with many tools that you can use to change the order of information and to identify and extract only the data needed at the moment.*

1. Sorting Table Data on One or Multiple Fields

* Sorting changes the order of information, and information may be sorted by one or more fields.
  + **Teaching Tips:** Sort Ascending sorts a list of text data in alphabetical order or a numeric list in lowest to highest order. Sort Descending sorts a list of text data in reverse alphabetical order or a numeric list in highest to lowest order.

1. Creating, Modifying, and Removing Filters

* A filter is a set of criteria that is applied to a table to display a subset of records in that table.
* **Teaching Tips:** Filter by Selection displays only the records that match the selected criteria.
* **Teaching Tips:** Filter by Form displays records based on multiple criteria and enables the user to apply logical operators and use comparison operators.
* **Teaching Tips:** To apply an OR condition to a Filter by Form, click the Or tab at the bottom of the window.
* **Teaching Tips**: If the Filter by Form design sheet opens with criteria already filled in, you can delete it by clicking Advanced in the Sort & Filter group, and then clicking Clear All Filters.
* **Teaching Tips:** Applying a filter does not delete any records; filters only hide records that do not match the criteria.

#### Access Versus Excel, and Relational Databases

*Both Access and Excel contain powerful tools that enable you to extract the information you need and arrange it in a way that makes it easy to analyze. An important part of becoming a proficient Office user is learning which of these applications to use to accomplish a task.*

1. Knowing When to Use Access or Excel to Manage Data

* Use Access to manage data when you require multiple related tables to store your data; have a large amount of data; need to connect to and retrieve data from external databases; need to group, sort, and total data based on various parameters; and/or have an application that requires multiple users to connect to one data source.
* Use Excel to manage data when you need one worksheet to handle all of your data; have mostly numeric data; require subtotals and totals in your worksheet; want to primarily run a series of “what if” scenarios on your data; or need to create complex charts and graphs.
  + **Teaching Tips:** Access provides built-in tools to help organize data better than Excel. One tool that helps Access organize data is the ability to create relationships between tables.

1. Understanding Relational Power

* Access allows you to manage groups of data (tables) and then set rules between tables (relationships). This enables you to extract information from multiple tables into a single query or report. When relational databases are designed properly, users can easily combine data from multiple tables to create queries, forms, and reports.
* Use the Relationships window: A relationship is a connection between two tables using a common field. The benefit of a relationship is to efficiently combine data from related tables for the purpose of creating queries, forms, and reports.
* Enforce referential integrity: Enforcing referential integrity when setting a table relationship ensures that data cannot be entered into a related table unless it first exists in the primary table.
  + **Teaching Tips:** Databases with many tables with relationships might make it difficult to see the join lines between tables. Tables can be repositioned to make it easier to see the join lines. To reposition a table, drag the table by its table name to the new position.
  + **Teaching Tips**: The data types of the common fields must be the same. The common fields are not required to have the same name, but usually do.

#### Access Database Creation

#### After you know the fundamentals of an Access database and understand the power of relational databases, you are better prepared to create your own database.

A. Creating a Database

* Create a Web application using a template: Creating a custom Web app enables you to create a database that you can build, use, and share with others through the Web.
* Create a blank desktop database: Creating a blank desktop database lets you create a database specific to your needs.
* Create a desktop database using a template: A template is a predefined database that includes professionally designed tables, forms, reports, and other objects that you can use to jumpstart the creation of your database.
* **Teaching Tips:** Creating a Web app (application) is new in Access 2013. An Access Web app is a new type of database that lets you build a browser-based database application—you can create a database in the cloud that you and others can access and use simultaneously. This requires that you use a host server such as SharePoint (a Web application platform developed by Microsoft) or Office 365 (a cloud service edition of SharePoint).

### ONLINE CHAPTER REVIEW

To find an online chapter review to help your students practice for tests, visit the Companion Web site at <http://www.pearsonhighered.com/exploring/>.

### ADDITIONAL WEB RESOURCES

1. What's new in Access 2013: [http://office.microsoft.com/en-us/access-help/what-s-new-in-access-2013-HA102809500.aspx](https://mail.exchange.viterbo.edu/owa/redir.aspx?C=a63695e0340f427d84e26c5e37cd4de7&URL=http%3a%2f%2foffice.microsoft.com%2fen-us%2faccess-help%2fwhat-s-new-in-access-2013-HA102809500.aspx)
2. Changes in Access 2013: [http://msdn.microsoft.com/en-us/library/office/jj618413.aspx](https://mail.exchange.viterbo.edu/owa/redir.aspx?C=a63695e0340f427d84e26c5e37cd4de7&URL=http%3a%2f%2fmsdn.microsoft.com%2fen-us%2flibrary%2foffice%2fjj618413.aspx)
3. Access blog: [http://blogs.office.com/b/microsoft-access/archive/2012/07/20/introducing-access-2013-.aspx](https://mail.exchange.viterbo.edu/owa/redir.aspx?C=a63695e0340f427d84e26c5e37cd4de7&URL=http%3a%2f%2fblogs.office.com%2fb%2fmicrosoft-access%2farchive%2f2012%2f07%2f20%2fintroducing-access-2013-.aspx)
4. Access web apps: [http://blogs.office.com/b/microsoft-access/archive/2012/09/14/3-awesome-access-2013-web-apps-you-can-build-right-now.aspx](https://mail.exchange.viterbo.edu/owa/redir.aspx?C=a63695e0340f427d84e26c5e37cd4de7&URL=http%3a%2f%2fblogs.office.com%2fb%2fmicrosoft-access%2farchive%2f2012%2f09%2f14%2f3-awesome-access-2013-web-apps-you-can-build-right-now.aspx)
5. Database basics: [http://office.microsoft.com/en-us/access-help/database-basics-HA010064450.aspx](https://mail.exchange.viterbo.edu/owa/redir.aspx?C=a63695e0340f427d84e26c5e37cd4de7&URL=http%3a%2f%2foffice.microsoft.com%2fen-us%2faccess-help%2fdatabase-basics-HA010064450.aspx)

### PROJECTS AND EXERCISES

|  |  |  |
| --- | --- | --- |
|  | **Data file** | **Save As** |
| Hands-On Exercise 1 | a01h1Traders | a01h1traders\_LastFirst |
| Hands-On Exercise 2 | a01h1Traders\_LastFirst | a01h2traders\_LastFirst |
| Hands-On Exercise 3 | a01h2Traders\_LastFirst | a01h3Traders\_LastFirst |
| Hands-On Exercise 4 | none | a01h4Contacts\_LastFirst |
| Practice Exercise 1 | none | a01p1Rewards\_LastFirst |
| Practice Exercise 2 | a01p2Coffee | a01p2Coffee\_LastFirst |
| Practice Exercise 3 | none | a01p3Camping\_LastFirst |
| Mid-Level Exercise 1 | none | a01m1Homes\_LastFirst |
| Mid-Level Exercise 2 | a01m2NatConf | a01m2NatConf\_LastFirst |
| Mid-Level Exercise 3 | a01m1Properties.xlxs | a01m1Homes\_LastFirst |
| Mid-Level Exercise 4 (collaboration) | a01m3Phones | a01m3PhonesGroupX\_LastFirst |
| BYC 2 Research | a01b2NWind | a01b2NWind\_LastFirst |
| BYC 3 Disaster Recovery | a01b3Recover | a01b3Recover\_LastFirst |
| BYC 4 Soft Skills | a01b4Ledger | a01b4Ledger\_LastFirst |
| Capstone | a01c1Books | a01c1Books\_LastFirst |

### CHAPTER REVIEW/ANSWERS TO END OF CHAPTER MATERIAL

**Key Terms Matching Answer Key**

1. **Datasheet view (D)** is the view that enables you to add, edit, and delete the records of a table. p. 622

2. A **form (I)** is an Access object that enables you to enter, modify, or delete table data. p. 620

3. **Compact and Repair (B)** is an Access utility that reduces the size of the database and can repair a corrupt database. p. 627

4. An **object (K)** is a main component that is created and used to make a database function. p. 619

5. **Filter by Form (G)** is a filtering method that displays records based on multiple criteria. p. 638

6. **Relational database management system (RDBMS) (O)** is a system that uses the relational model to manage groups of data (tables) and rules (relationships) between tables. p. 646

7. **Custom web app (C)** is a database that can be built, used, and shared with others through the use of a host server. p. 653

8. A **report (Q)** is an object that contains professional-looking formatted information from underlying tables or queries. p. 620

9. A **table (S)** is an object used to store data, and the foundation of every database. p. 619

10. **Back Up Database (A)** is an Access utility that creates a duplicate copy of the database. p. 627

11. A **template (T)** is a predefined database that includes professionally designed tables, forms, reports, and other objects. p. 653

12. **Filter by Selection (H)** is a filtering method that displays only records that match selected criteria. p. 637

13. A **relationship (P)** is a connection between two tables using a common field. p. 645

14. **Sort (R)** is a method of listing records in a specific sequence. p. 636

15. **Design view (E)** is a view that enables you to create tables, add and delete fields, and modify field properties. p. 624

16. **Navigation Pane (J)** is an Access interface element that organizes and lists the database objects in a database. p. 619

17. A **query (M)** is a question you ask that can help you find and retrieve table data meeting conditions you specify. p. 620

18. **A field (F)** is the smallest data element in a table, such as first name, last name, address, or phone number. p. 619

19. A **record (N)** is a complete set of all the fields (data elements) about one person, place, event, or concept. p. 619

20. A **primary key (L)** is the field (or combination of fields) that uniquely identifies each record in a table. p. 624

**Multiple Choice Answer Key**

1. Which sequence represents the hierarchy of terms, from smallest to largest?

**(b) Field, record, table, database**

2. You edit several records in an Access table. When should you execute the Save command?

**(d) Records are saved automatically; the save command is not required.**

3. Which of the following is *not* true of an Access database?

**(c) Every table in a database contains the same number of records as every other table.**

4. Which of the following is *true* regarding the record selector box?

**(a) An orange border surrounds the record selector box and the active record.**

5. Which of the following will be accepted as valid during data entry?

**(c) Entering numbers into a text field**

6. You have finished an Access assignment and wish to turn it in to your instructor for evaluation. As you prepare to transfer the file, you discover that it has more than doubled in size. You should:

**(c) Compact and repair the database before sending it to your instructor.**

7. Which of the following conditions is available through *Filter by Selection*?

**(a) Equals condition**

8. An Employees table is open in Datasheet view. You want to sort the names alphabetically by last name and then by first name (e.g., Smith, Andrew). To do this, you must:

**(a) First sort ascending on first name and then on last name.**

9. Which of the following is *not* true when creating relationships between tables?

**(b) The common fields used to create a relationship must both be primary keys.**

10. All of the following statements are *true* about creating a database *except*:

**(d) The objects provided in a template cannot be modified.**