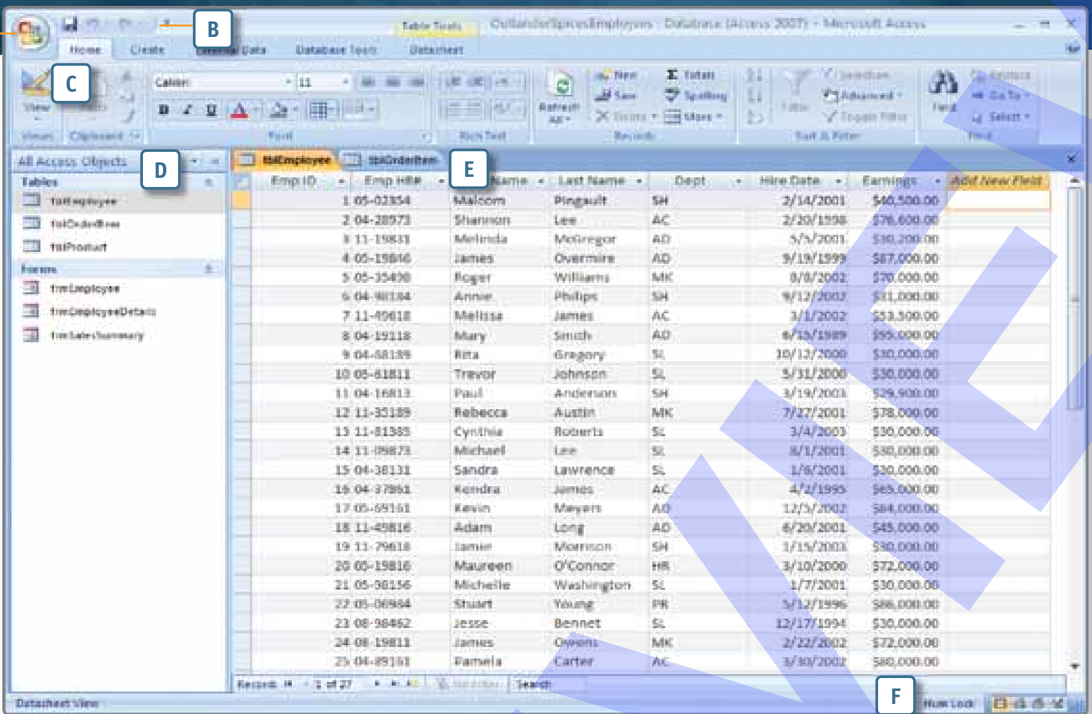
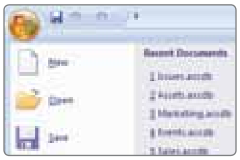
FastCARDS™
Your Quick Start Guide

Access™ 2007



To start Microsoft® Access 2007, click **Start** and choose **All Programs**, **Microsoft Office**, **Microsoft Office Access 2007**.

A Office Button



Provides access to a menu of commonly used commands, such as New, Open, Save As, Print, and Close. (This menu replaces the File menu used in previous versions of Access.) The right side of the menu contains links to recently opened files.

B Quick Access toolbar

Contains buttons for frequently used commands (by default, Save, Undo, and Redo). To display a commonly used command on the toolbar, click the Quick Access toolbar button and choose the command you want to add.

C Ribbon

Contains tabs, which in turn contain groups of related tools, such as buttons, lists, and galleries. A gallery is a collection of commands or options that are represented graphically to show their results.

D Navigation Pane

Displays the objects in your database. Objects include tables, forms, queries, and reports. To open an object, double-click it. You can expand and collapse the Navigation Pane by clicking the Shutter Bar Open/Close button at the top of the pane.

E Database window

Provides a command center for working with database objects. When you open a database object, it will appear in the Database window. If you open multiple objects, Access 2007 displays them as a series of tabs above the Database window. Click a tab to display that object in the Database window.

F Status bar

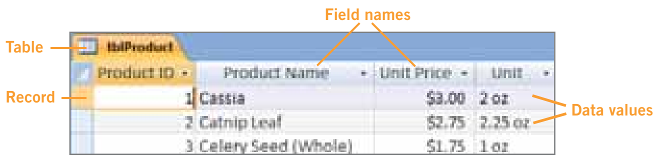
Tells you the current view. Click the View buttons to switch between views. The View buttons available depend on the type of object selected. For example, the View buttons for a table are Datasheet, PivotTable®, PivotChart®, and Design.

Viewing and Creating Databases

UNDERSTANDING DATABASE CONCEPTS

A *database* is a collection of data or information. A *relational database* contains data that is organized into multiple related tables. You create relationships between tables by linking one or more fields in one table to fields in another table.

Database components



- **Table:** A collection of records and their component fields. Each row is called a *record;* each column is called a *field*.
- **Record:** A complete set of information about an item in the table. Each record is made up of a number of fields.
- **Field:** A specific type of data that applies to each item listed in the table. Each column in a table is a field that contains data values.
- **Data value:** An item of data. A data value is the smallest unit of information in a database.

Common database objects

OBJECT	USED TO...
Table	Store data. For example, you can use a table to store employee details, such as names and departments.
Query	Retrieve specific information—such as which product had the highest sales for a given month—from a table.
Form	Enter data into a table in a database. You can also use a form to view and modify records in a table.
Report	Present data in a printed format. You can customize a report by applying different font styles and headings.
Macro	Automate frequently performed database tasks, such as printing a set of weekly reports.
Module	Automate and customize database operations. Modules are programs written in Visual Basic®.

WORKING WITH OBJECTS

Change an object's view

To change an object's view, open it, and then click the View button on the Ribbon and choose the view you want to use. The views available depend on the type of object selected.

- **Datasheet view:** View the data in a table, the results of a query, or the information on a form. This is the default view when you open a table.
- **Design view:** Change the structure of a table, query, report, form, macro, or module.
- **Form view:** View and enter data into a form or subform. This is the default view when you open a form.
- **Report view:** View data in a report.
- **Print Preview:** Preview information before printing.
- **SQL view:** View SQL code for a query.
- **Layout Preview:** View a report before printing.
- **PivotChart view:** Display data graphically in Datasheet view.
- **PivotTable view:** Display a table that you can use to analyze data.

Delete an object

Make sure the object is closed. Then, select it in the Navigation Pane and press DELETE.

OPENING, CREATING, AND SAVING DATABASES

Open a database

1. Start Access and do any of the following:
   - Click the Office Button and choose **Open**.
   - Press CTRL+O.
   - On the Getting Started screen, in the Open Recent Database pane, click the database name or click **More** to browse for the database.
2. If an Open dialog box appears, specify the name of the folder and database you want to open, and then click **Open**.

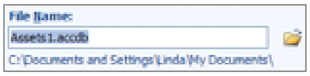
Plan a database

Before you create a database, it's important that you consider the type of data to be stored. To plan a database, you must determine:

- The purpose of the database
- The number of tables you'll need, and the type of information you'll store in each table
- The fields that will be used in each table
- The types of queries you'll want to perform on the database
- The forms you'll need to create
- The types of reports you'll need to generate

Create a database by using a template

1. Start Access and do one of the following:
   - In the middle pane, under Featured Online Templates, select a template.
   - In the left pane of the Getting Started screen, select a template category. Then, in the middle pane, select the template that most closely describes what you need.
2. In the right pane, enter a name for the database. To change the database's location, click the Browse button , select a new location, and click **OK**.



3. Click **Create** or, if the template is online, click **Download**.

Create a blank database

When you create a blank database, you start with an empty table named Table1, which opens in Datasheet view. You must then manually create the objects you want to include in the database. The manual method is more flexible because you can create custom tables and fields.

1. Click the Office Button and choose **New**.
2. In the middle pane of the Getting Started screen, click **Blank Database**.
3. In the right pane, enter a name for the database. To change the database's location, click , select a new location, and click **OK**.
4. Click **Create**.

Name database files and objects

Database and object names can have any combination of letters, numbers, special characters, and embedded spaces, with the following exceptions:

- Names cannot contain more than 64 characters and cannot start with a space.
- Names cannot include periods (.), exclamation points (!), accents (`), or brackets ([ ]).

NOTE: It's a good idea to use underscores (_) instead of spaces between words.

Save a database so it is compatible with Access 2002 and 2003

By default, Access 2007 creates databases with the extension .accdb. Previous versions of Access have used the .mdb extension. Here's how to save a database created in Access 2007 so it is compatible with older versions of Access:

1. Click the Office Button .
2. Point to **Save As** and choose **Access 2002-2003 Database**.

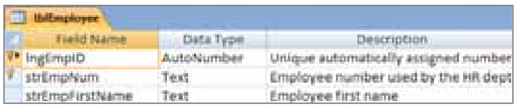
CREATING TABLES

Create a table by copying another table's structure

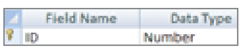
1. In the Navigation Pane, right-click the table whose structure you want to copy and choose **Copy**.
2. Right-click a blank area in the Navigation Pane and choose **Paste**.
3. Edit the Table Name field to give the table a new name.
4. Under Paste Options, select **Structure Only**.
5. Click **OK**.

Create a table in Design view

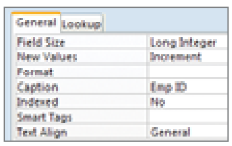
1. Click the **Create** tab. In the Tables group, click **Table Design**. The Table Tools | Design tab appears.
2. For each field you want to create, specify a field name, data type, and description.



3. Select the row that you want to define as a primary key and click **Primary Key** on the Table Tools | Design tab. A key icon will appear next to the selected row to identify it as the primary key.



4. To apply additional control options, select the field and then change its settings on the General tab (under Field Properties).
5. Click the Office Button and choose **Save**.
6. Enter a name for the table and click **OK**.



Set multiple primary keys

Open the table in Design view. While holding CTRL, select the rows that you want to use as primary keys. On the Table Tools | Design tab, click **Primary Key**.

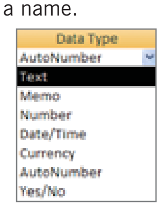
Data types

The following list describes some of the data types available for fields:

- **Text:** Stores text or combinations of text and numbers. Text fields can store up to 255 characters.
- **Number:** Stores numeric information used in calculations. There are several sizes of Number fields, which can store numbers with varying degrees of precision.
- **Date/Time:** Stores dates and times, such as 2/3/2000 2:00:00 PM and 1/1/2150 5:00:00 PM. Fields of this type accommodate dates and times across thousands of years.
- **Currency:** Stores monetary values, such as $5.00. Currency fields can store up to 15 digits to the left of the decimal point and 4 digits to the right.
- **Yes/No:** Stores one of two values: Yes or No. The size of Yes/No fields is controlled by Access.
- **Memo:** Stores lengthy text, such as comments or notes. Memo fields can store up to 65,535 characters.

Add fields to a table in Design view

1. In the Field Name column, click an empty cell and enter a name.
2. Press TAB to move to the Data Type column. Click the down-arrow and select the data type you want to use.
3. Press TAB and enter a description.
4. Press CTRL+S to save the table.



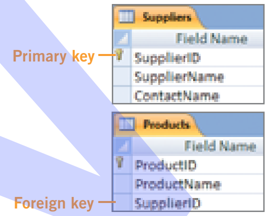
Add fields in Datasheet view

- Click in the Add New Field column and enter your data. On the Table Tools | Datasheet tab, click **Rename**. Enter a name for the new field.
- Click New Field and drag a field from the Field Templates pane onto the table.

CREATING TABLE RELATIONSHIPS

Primary and foreign keys

A *primary key* is a field that uniquely identifies every record in a table. In the example shown here, the Suppliers table has a primary key field called SupplierID. If the primary key field from a table (for example, SupplierID) appears in a second related table (such as the Products table), then the field is called a *foreign key* in the second table.

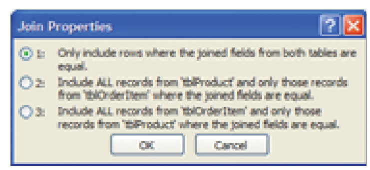


Types of relationships

- **One-to-one:** One record in the primary table is related to only one record in a related table, and vice versa.
- **One-to-many:** One record in the primary table is related to several records in the related table, while a record in the related table is related to only one record in the primary table. This is the most common type of relationship.
- **Many-to-many:** Several records in one table are related to several records in another table.

Create relationships between tables

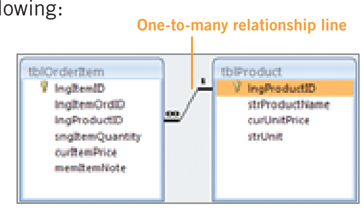
1. Click the **Database Tools** tab.
2. In the Show/Hide group, click **Relationships**. The Relationship Tools | Design tab appears on the Ribbon.
3. Click **Show Table** to open the Show Table dialog box. Select the desired tables, click **Add**, and click **Close**.
4. In the Relationships window, drag a field from the first table to a field in the second table. The Edit Relationships dialog box appears.
5. Click **Join Type** to open the Join Properties dialog box. Select the desired join option and click **OK**.
6. Check **Enforce Referential Integrity** and click **Create**.



Work with relationships

In the Relationships window, right-click the relationship line connecting two tables, and then choose one of the following:

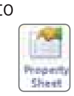
- **Edit Relationship**. Make your changes in the Edit Relationships dialog box and click **OK**.
- **Delete Relationship**. Click **Yes** to close the warning message.

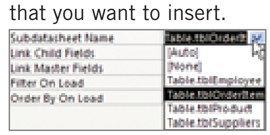


USING SUBDATASHEETS

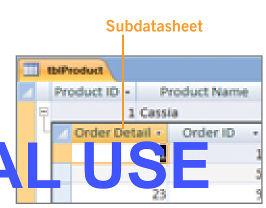
A *subdatasheet* is a datasheet within another datasheet. It displays a set of records from a related table. When you join tables, Access generates subdatasheets automatically. If you edit a subdatasheet, all changes will automatically be entered in the related table.

- **Insert a table as a subdatasheet:** Open the table where you want to insert a subdatasheet and switch to Design view. On the Table Tools | Design tab, click **Property Sheet**. Click the down-arrow for the Subdatasheet Name field, and select the name of the table that you want to insert.





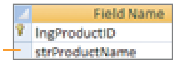
- **View a subdatasheet for a record:** Click the expand indicator ⊞ in Datasheet view.
- **Close a subdatasheet:** Click the collapse indicator ⊟.



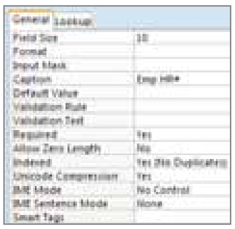
MODIFYING FIELDS IN A TABLE

To modify a field in a table, open the table in Design view and then do any of the following:

- **Select a field:** Click the box to the left of the Field Name column (the row selector).



- **Insert a field above an existing field:** Select the field that you want to insert the new field above. Click the Insert Rows button Insert Rows on the Table Tools | Design tab.
- **Insert a field at the end of the table:** Select the first empty field row and enter your information.
- **Delete a field:** Select the field and click the Delete Rows button Delete Rows on the Table Tools | Design tab. If the field contains data or is a primary key, click **Yes** to confirm the deletion.
- **Move a field:** Select the field. Then, click the field's row selector again, but don't release the mouse button. Drag the field row to its new location.
- **Modify field properties:** Select the field. Under Field Properties, on the General tab, change the desired settings. Field properties control how data is stored and displayed. Some common properties include:
  - **Field Size:** Specifies the maximum number of characters that can be entered in the field.
  - **Input Mask:** Specifies the data pattern for the field.
  - **Required:** Set this property to **Yes** to require that users enter a value in the field.
  - **Smart Tags:** Specifies actions—such as sending e-mail, scheduling a meeting, or showing the calendar—for the data values in the fields.



ENTERING AND EDITING DATA

Add records to a table

There are three ways to add records to a table:

- Click the New button New in the Records group on the Home tab in Datasheet view.
- Click the New (blank) record button in the navigation bar at the bottom of the Datasheet window.
- Click the last row under the first field heading and enter your data.

When you enter data into a record, the record is automatically saved.

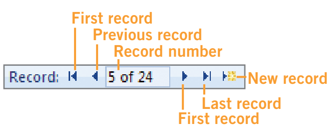
Undo changes in a table

If you accidentally delete or modify a record, click the Undo button on the Quick Access toolbar to restore the values.

Enter or edit data in a table or form

Open a table in Datasheet view, or open a form in Form view. Then do any of the following:

- **Enter data in a table:** Click a blank field, enter your data, and then press TAB or ↵ ENTER to move to the next field.
- **Enter data in a form:** Click the New (blank) record button in the form window's navigation bar. Click a field, enter your data, and then press TAB or ↵ ENTER to move to the next field.
- **Edit data in a table or form:** Use the navigation buttons in the table or form window to find the record you want to edit. Replace field contents as needed.



- **Copy information from the same field in the previous record:** Click an empty field and press CTRL+' (apostrophe).
- **Enter the current date:** Press CTRL+; (semicolon).
- **Enter the current time:** Press CTRL+SHIFT+: (colon).

CREATING AND MODIFYING FORMS

Create forms to make entering data easier. A form typically shows just one record at a time instead of showing the entire table.

Use the Form Wizard

1. Click the **Create** tab.
2. In the Forms group, click **More Forms** and choose **Form Wizard**.
3. Select a source table and/or query, select the desired fields, and click **Next**.
4. Select a form layout and click **Next**. Select a form style and click **Next**.
5. Enter a title for the form, select the desired option for viewing or modifying the form's design, and click **Finish**.

Use the Blank Form tool

1. On the Create tab, in the Forms group, click **Blank Form**.

   A blank form opens in Layout view, and a Field List pane appears. The Form Layout Tools | Format and Arrange tabs appear on the Ribbon.
2. In the Field List pane, click the plus sign (+) next to the table that contains the fields you want to use on the form.

3. To add a field, double-click it in the Field List pane or drag it onto the blank form. (Use CTRL+click to select multiple fields.)
4. Use the buttons in the Controls group on the Format tab to add a logo, a title, page numbers, or the date and time.

5. To use more controls, switch to Design view. Use the tools in the Controls group on the Form Design Tools | Design tab. Click the control you want to add to the form, and then drag on the design grid to create the control.

Work with forms

- **Add a title to a form:** In Design view, click the Form Design Tools | Design tab. In the Controls group, click the Title button Title. Type your title in the box that appears in the Form Header section.
- **Delete a field in Design view:** Click the text box for the field and press DELETE.

SORTING AND FILTERING RECORDS

Sort records

Sorting is the process of organizing records in a meaningful way so that you can retrieve data in an order of your choice. You can sort records manually in Datasheet view or Form view. To perform a sort, select the field you want to sort by. Then, on the Home tab, in the Sort & Filter group, click Ascending or Descending.

To remove all sorts from a table, click the Clear All Sorts button in the Sort & Filter group.

Filter records

Filtering is the process of temporarily isolating a subset of records that meet certain criteria you specify. Open the table in Datasheet view and do any of the following:

- **Filter by selection:** Select a whole value or just part of a value. Right-click the selection and choose an option from the menu.
- **Filter by excluding a selection:** Right-click a value that you want to filter out and choose one of the **Does not <value>** menu options.
- **Filter by form:** Filters records based on a specific condition. In the Sort & Filter group, click **Advanced** and select **Filter By Form**. A blank form appears. Enter criteria in the empty fields.

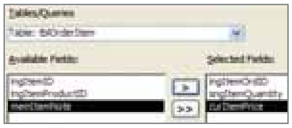
To remove a filter, click **Toggle Filter** in the Sort & Filter group.

CREATING AND EDITING QUERIES

A *query* is a question you ask about the data stored in a database. In response to a query, Access displays the records and fields that answer your question.

Create a simple query by using the Query Wizard

1. Click the **Create** tab. In the Other group, click **Query Wizard**.
2. Verify that Simple Query Wizard is selected and click **OK**.
3. Select the source table(s) for the query, add the desired fields, and click **Next**.
4. Specify whether you want the query to return detailed data or a summary of the data. Click **Next**.

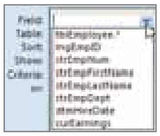


5. Enter a title for the query, select the desired option for viewing or modifying the query's design, and click **Finish**.

Create a query in Design view

1. Click the **Create** tab. In the Other group, click **Query Design**.
2. On the Tables tab of the Show Table dialog box, select a table. Click **Add** and then click **Close**.

   The Database window will have a new tab, with the table you selected at the top and a grid at the bottom.
3. In the first cell of the Field row, use the drop-down list to select the desired field. The table name will appear in the field's Table cell.



4. ***Optional:*** To add a total to a query, click the Totals button on the Query Tools | Design tab. Click a Total cell for the field whose data you want to calculate, and choose a calculation option (such as Sum) from the list. To remove the Total row, click the button again.
5. ***Optional:*** To sort query results, click the Sort cell for the field you want to sort by and choose either **Ascending** or **Descending**.
6. ***Optional:*** To enter criteria for the query, either click the field's Criteria cell and enter the criteria expression (formula), or right-click the cell and choose **Build** to use the Expression Builder.
   - All criteria entered in the same row are combined together with the AND operator. (All conditions must be met.)
   - Criteria entered in cells in different rows are combined with the OR operator. (At least one condition must be met.)
7. To display a field in the query result, check the **Show** box.
8. Repeat steps 3–7 as needed.
9. In the Results group, click the Run button to test the query.

To save the query, click the Save button on the Quick Access toolbar. Enter a name for the query and click **OK**.

CREATING AND VIEWING REPORTS

A *report* presents data in an organized format suitable for viewing on screen or printing.

Use the Report Wizard to create a report

1. Click the **Create** tab. In the Reports group, click Report Wizard.
2. From the Tables/Queries list, select the table on which the report will be based.
3. From the Available Fields list, select the fields you want to include in the report. Click **Next**.
4. Complete the remaining steps of the wizard, and click **Finish**.

View a report

1. Click **Reports** in the Navigation Pane.
2. Double-click a report to display it in Report view, or right-click the report you want and choose **Print Preview**.

WORKING WITH FORMS AND REPORTS

Add a chart to a form or report

1. Open the form or report in Design view.
2. On the Design tab, click the Insert Chart button.
3. On the form or report, click where you want to place the chart.
4. Complete the steps in the Chart Wizard.
5. Switch to Form or Report view or Print Preview to see the chart with the current data.

Add controls to a form or report

When you open a form or report in Design view, the Design tab appears on the Ribbon. Use the tools in the Controls group to change the form or report's appearance or functionality. Following are some commonly used controls.

ICON	NAME	USED TO...
	Label	Name a field or add descriptive text.
	Text box	Enter data, such as numbers or text.
	Option button	Select a single option from a set of options.
	Check box	Select multiple options from a list of options.
	Combo box	Select an option from a drop-down list.
	List box	Select multiple options from a list.

Work with controls

- **Add a control to a form or report:** Click the desired control on the Design tab. If necessary, drag on the form or report to create the control.

  NOTE: Some controls are automatically inserted when clicked.
- **Select a control:** Click the desired control on the form or report.
- **Move a control:** Point to the control you want to move, and when the mouse pointer changes to a four-headed arrow, drag the control to its new position.
- **Resize a control:** Click the desired control on the form or report. Drag a handle to resize the control.

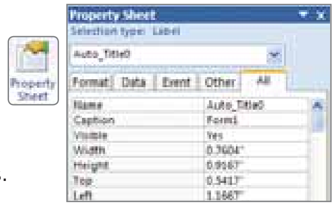
Anchor a control

You can anchor controls on a form. If a user resizes a form, anchored controls will remain in the same location and will resize if necessary.

1. Open the form in Design view or Layout view and select the control that you want to anchor.
2. On the Arrange tab, in the Size group, click **Anchoring** and select the anchoring method.

Modify control or section properties in a form or report

1. In Design view, select either the desired control or the desired section in a form or report.
2. On the Design tab, in the Tools group, click **Property Sheet**.
3. In the property sheet, change the desired properties.
4. Press CTRL+S to save the changes.



Preview and print

- **Preview the database object:** Open the database object (table, form, report, or query). On the Quick Access toolbar, click and choose **Print Preview**.
- **Print a table, form, report, or query:** Press CTRL+P, select the print options you want, and click **OK**.

Frequently Asked Questions

HELP AND ACCESS OPTIONS

Where can I get more help with Access 2007?

Press F1 to display Access Help. You can also visit the Office Online Web site for further information and resources, such as database templates: **office.microsoft.com/access**.

How do I change the default settings for Datasheet view?

1. Click the Office Button and click Access Options.
2. On the left, click **Datasheet**.
3. Change the default colors, gridlines, cell effects, font, and font size to the settings you want used on all default datasheets.
4. Click **OK**.

How do I set a default value or validate data for a field?

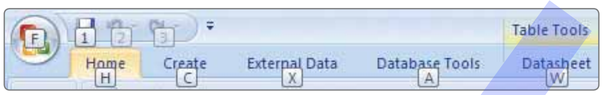
1. Open the table in Design view.
2. Click the field for which you want to set a default value or validate data. Under Field Properties, the field's general properties appear.
3. To assign a default value, enter it in the Default Value box.
4. To use a validation rule to check data that's entered into the field, enter the desired rule in the Validation Rule box.
5. Press CTRL+S to update the table.

How do I compact and repair an Access file?

To ensure optimal performance, you should compact and repair your Access files on a regular basis. If you are compacting a shared Access database, make sure that no one else has it open. Then click the Office Button, point to **Manage**, and choose **Compact and Repair Database**.

What are Key Tips and how do I use them?

1. Press ALT to display the Key Tip badges. They first appear for all Ribbon tabs, the Quick Access toolbar, and the Office Button.



2. Press the key for the desired tab to display all of the Key Tip badges for that tab's buttons.
3. Press the key or keys for the button you want. If the Key Tip is two letters, press the first key and then the second one.

What are some common keyboard shortcuts?

KEYBOARD SHORTCUT	USED TO...
F2	Switch between edit and navigation modes in a datasheet. In edit mode, the cursor is displayed.
F5	Activate the navigation bar's record number box.
F7	Check spelling for the active object.
F11	Show or hide the Navigation Pane.
CTRL+ +	Insert a new record in Datasheet or Form view.
CTRL+ –	In a datasheet, delete the current record.
CTRL+K	Insert a hyperlink in a table, form, or report.
CTRL+HOME	Move to the first field in the first record.
CTRL+END	Move to the last field in the last record.
ALT+↵ ENTER	Display a property sheet for a selected table, query, form, or report control in Design view.

WORKING MORE EFFICIENTLY

How can I find and replace data in a table?

1. Open the table in Datasheet view and click the **Home** tab.
2. In the Find group, click **Replace** to open the Find and Replace dialog box, with the Replace tab active.
3. In the Find What box, enter the text or value you want to locate.
4. In the Replace With box, enter the replacement text or value.
5. From the Look In list, select the name of the table.
6. Click **Find Next** to begin the search. When the first occurrence is found, do one of the following:
   - Click **Find Next** to find the next occurrence.
   - Click **Replace** to replace the selected occurrence.
   - Click **Replace All** to replace all occurrences of the data.

How can I convert a report to a Word document?

1. In the Navigation Pane, right-click the report you want to convert and choose **Export**, **Word RTF File**.
2. In the Export Wizard, specify the name of the destination file. To open the Word document automatically, check **Open the destination file after the export operation is complete**. Click **OK**.
3. In Word, press CTRL+S to save the document. In Access, click **Close** to close the wizard.

How can I import data from an Excel spreadsheet?

1. Open the destination database. Click the **External Data** tab and click **Excel**.
2. Locate and select the desired worksheet, and click **Open**.

   NOTE: If you see an error message indicating that Access cannot import the selected file, open the file in Excel and make sure the data is in tabular format.
3. Specify whether you want to import the data as a new table, append a copy of the records to the table, or link to the source data. Click **OK**.

How do I export a table, query, form, or report as an XML file?

1. In the Navigation Pane, right-click the table, query, form, or report you want to export and choose **Export**, **XML File**.
2. Specify a location and name for the file, and click **OK**.
3. In the Export XML dialog box, check one or more of the following:
   - **Data (XML):** Exports the data to an XML document.
   - **Schema of the data:** Exports the schema to an XML file.
   - **Presentation of your data (XSL):** Formats your table or query data by using an Extensible Stylesheet Language file.
4. Click **OK**.

Can I add smart tags to a field?

1. Open the table in Design view and select the field.
2. Under Field Properties, click the **Smart Tags** box, and then click the Build button.
3. Check the smart tags you want and click **OK**.

How do I back up an Access database?

1. Save and close all objects in the database.
2. Click the Office Button, point to **Manage**, and choose **Back Up Database**.
3. In the Save As dialog box, specify the name and location of the backup copy. Click **Save**.

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