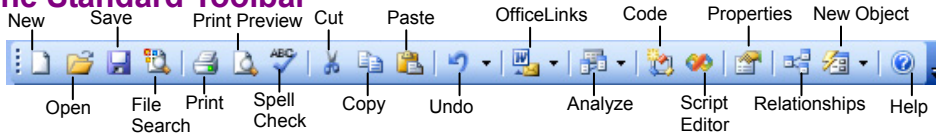


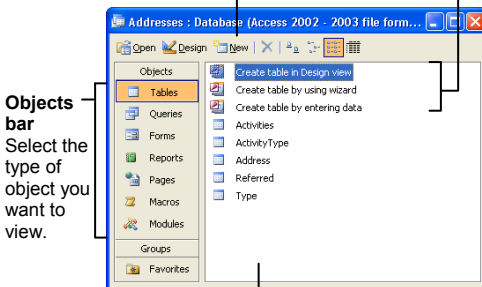
### The Database Window

#### The Standard Toolbar



#### Database Objects

Create a new object by clicking the **New button**... ..or by using a **Wizard**.



Database objects appear in this area.

**Tables** store related data in rows (records) and columns (fields).

**Queries** view, filter, calculate, change, sort, and examine the data stored in tables.

**Forms** are custom screens that provide an easy way to enter and maintain data in a table or query.

**Reports** present data from a table or query in a printed format—no data entry.

**Pages** are forms saved as Web pages so that the database can be accessed over the Internet.

**Macros** automate common tasks and can be invoked by clicking a button or pressing a shortcut key.

**Modules** are groups of procedures that are written in Visual Basic and used to automate tasks.

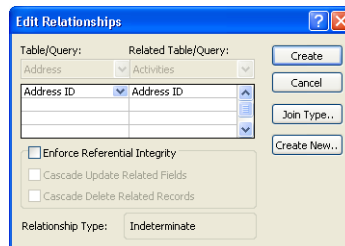
- **To Open an Object:** Double-click the object.
- **To Create a New Object:** Click the object type you want to create on the Objects bar. Click the **New** **New button** on the toolbar to create the object from scratch or double-click a **Wizard icon** to create an object step by step.
- **To Modify an Object:** Select the object and click the **Design** **Design button** on the toolbar.
- **To Delete an Object:** Select the object and press **<Delete>**.
- **To Rename an Object:** Right-click the object, select **Rename** from the shortcut menu, enter the new name, and press **<Enter>**.
- **To View the Database Window:** Select **Window** and the database name from the menu.
- **To Repair/Compress a Database:** Select **Tools** → **Database Utilities** → **Compact and Repair Database** from the menu.

- **To Cut or Copy an Object:** Select the object and click the **Cut button** or **Copy button** on the toolbar, or press **<Ctrl> + <X>** (cut) or **<Ctrl> + <C>** (copy).
- **To Paste an Object:** Click the **Paste button** on the toolbar or press **<Ctrl> + <V>**.
- **To Import an Object from Another File:** Right-click any empty area of the Database window and select **Import** from the shortcut menu. Select the database that contains the object(s) you want to import, click **Import**, select the objects, and click **OK**.
- **To Export a Table:** Click **Tables** on the Objects bar, right-click the table you want to export, and select **Export** from the shortcut menu. Enter a file name and select the file format from the **Save as type list**. Click **Export** and follow the onscreen instructions.

**Linking Tables** tells Access how two tables are related to each other. The fields that you use to link two tables must contain the same concept in two different tables. A *primary key* field from one table is often used when linking two different tables.

#### To Link Tables:

1. Click the **Relationships button** on the toolbar.
2. If necessary, open the Show Tables window by clicking the **Show Table button**. Then select the table, click the **Add button**, and repeat for each table. Click **Close** when finished.
3. Find the related table fields. Drag the field from one table and drop it on the related field in the second table. Make sure that the field names are correct.



4. (Optional) Check the Enforce Referential Integrity box to avoid creating "orphan" data. If you want to change the "join type" between the tables, click the **Join Type button**, select the type of join and click **OK**.
5. Click **Create** to create the relationship, then close the Relationships window and save your changes.

### Keyboard Shortcuts

#### General

Open a Database	<b>&lt;Ctrl&gt; + &lt;O&gt;</b>
Close a Database	<b>&lt;Ctrl&gt; + &lt;W&gt;</b>
Print Current View	<b>&lt;Ctrl&gt; + &lt;P&gt;</b>
Delete	<b>&lt;Delete&gt;</b>
Undo	<b>&lt;Ctrl&gt; + &lt;Z&gt;</b>
Help	<b>&lt;F1&gt;</b>
New Record	<b>&lt;Ctrl&gt; + &lt;+ &gt;</b>
Delete Record	<b>&lt;Ctrl&gt; + &lt;- &gt;</b>
Save Record	<b>&lt;Shift&gt; + &lt;Enter&gt;</b>
Cancel Changes	<b>&lt;Esc&gt;</b>
Insert Date	<b>&lt;Ctrl&gt; + &lt; ; &gt;</b>
Insert Time	<b>&lt;Shift&gt; + &lt;Ctrl&gt; + &lt;: &gt;</b>
Insert Value from Same Field in Previous Record	<b>&lt;Ctrl&gt; + &lt;' &gt;</b> (Apostrophe)
Check Spelling	<b>&lt;F7&gt;</b>
Switch Between Applications	<b>&lt;Alt&gt; + &lt;Tab&gt;</b>

#### Navigation—Go To:

Next Field	<b>&lt;Tab&gt;</b>
Previous Field	<b>&lt;Shift&gt; + &lt;Tab&gt;</b>
Next Screen	<b>&lt;Page Down&gt;</b>
Previous Screen	<b>&lt;Page Up&gt;</b>
First Record	<b>&lt;Ctrl&gt; + &lt;↑ &gt;</b>
Last Record	<b>&lt;Ctrl&gt; + &lt;↓ &gt;</b>

#### Editing

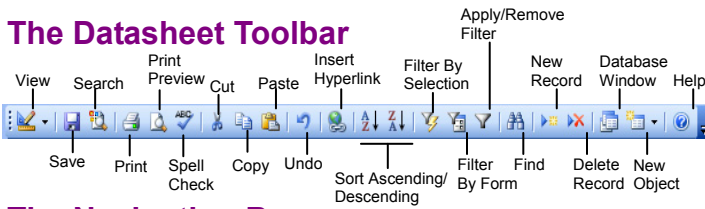
Cut	<b>&lt;Ctrl&gt; + &lt;X&gt;</b>
Copy	<b>&lt;Ctrl&gt; + &lt;C&gt;</b>
Paste	<b>&lt;Ctrl&gt; + &lt;V&gt;</b>
Find	<b>&lt;Ctrl&gt; + &lt;F&gt;</b>
Replace	<b>&lt;Ctrl&gt; + &lt;H&gt;</b>
Select All	<b>&lt;Ctrl&gt; + &lt;A&gt;</b>

#### Design View

Properties	<b>&lt;Alt&gt; + &lt;Enter&gt;</b>
Open object in Design View	<b>&lt;Ctrl&gt; + &lt;Enter&gt;</b>
Shift focus to a subsection	<b>&lt;Ctrl&gt; + &lt;Tab&gt;</b>
Save Object	<b>&lt;Ctrl&gt; + &lt;S&gt;</b>

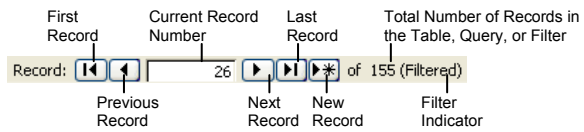
## Working with Data

### The Datasheet Toolbar



### The Navigation Bar

(Found on the horizontal scrollbar near the bottom of most windows.)



- Database information can be directly added and modified from tables and some queries and forms.
- To Add a New Record:** Click the **New Record** button on the Navigation bar.
- To Select a Record:** Click the **Record selector** to the left of the record or select **Edit** → **Select Record** from the menu.
- To Delete a Record:** Select the record and click the **Delete Record** button on the toolbar, or select **Edit** → **Delete Record** from the menu.
- To Spell Check:** Click the **Spelling** button on the toolbar.
- To Find Information in a Table:** Place the cursor in the field that contains the value you want to search for, then click the **Find** button on the toolbar or press **<Ctrl> + <F>**. Type the value you want to search for in the **Find What** box and click **Find Next**. Click **Find Next** until you've found what you're looking for.
- To Replace Information in a Table:** Place the cursor in the field that contains the value you want to replace, then select **Edit** → **Replace** from the menu or press **<Ctrl> + <H>**. Then type the value you want to search for in the **Find What** box and the new value in the **Replace With** box. Click **Find Next** until you've found what you're looking for, and then click **Replace** or **Replace All** to replace every instance of the value.
- To Sort Information:** Place the cursor in the field that you want to sort by and click either the **Sort Ascending** or **Sort Descending** button on the toolbar.
- To Filter by Selection:** Place the cursor in the record and field that matches the selection criterion and click the **Filter By Selection** button on the toolbar.
- To Filter by Form:** Click the **Filter by Form** button on the toolbar. Click the **down arrow** next to the field that contains the selection criterion and select the value you want the filtered records to match. You can use more than one field to filter data.
- To Remove a Filter:** Click the **Remove Filter** button on the toolbar.

## Forms and Reports

- To Create a Form Using a Wizard:** Click **Forms** in the Objects bar and double-click the **Create form by using wizard** icon. Follow the onscreen instructions.
- To Create a Report Using a Wizard:** Click **Reports** in the Objects bar and double-click the **Create report by using wizard** icon. Follow the onscreen instructions.
- To Toggle between Form/Report and Design View:** Click the **View** button on the toolbar.

## Creating and Designing Tables

- To Create a New Table Using a Wizard:** Click **Tables** in the Objects bar and double-click the **Create table by using wizard** icon. Follow the onscreen instructions.
- To Create a New Table from Scratch:** Click **Tables** in the Objects bar and double-click the **Create table in Design view** icon. Type a field name for the first column you want to create in the **Field Name** column, press **<Tab>**, click the **Data Type** drop-down arrow, and select the data type for the field. Repeat as necessary to add new fields to the table. Close the table window, click **Yes** to save the table, enter a table name, and click **OK**.

### Data Types

Data Type	Description
<b>Text (Default)</b>	Stores text, numbers, or a combination of both, up to 255 characters long.
<b>Memo</b>	Stores long text entries—up to 64,000 characters long.
<b>Number</b>	Stores numbers that can be used in calculations.
<b>Date/Time</b>	Stores dates, times, or both.
<b>Currency</b>	Stores numbers and symbols that represent money.
<b>AutoNumber</b>	Automatically fills in a unique number for each record.
<b>Yes/No</b>	Stores only one of two values, such as Yes or No.
<b>OLE Object</b>	Stores objects created in other programs, such as a graphic, Excel spreadsheet, or Word document.
<b>Hyperlink</b>	Stores clickable links to Web pages on the Internet or files on a network.
<b>Lookup Wizard</b>	A wizard that helps you create a field whose values are selected from another table, query, or list of values.

## Queries

### The Design Query Window

To add a field to the query, click and drag it from the table... down to the QBE grid.

The queried tables appear here. You can also link tables.

Sort order

Show results

Criteria rows

QBE Grid

- To Create a Select Query:** Click **Queries** in the Objects bar and double-click the **Create query in Design view** icon. Select the table you want to query and click **Add**. Repeat for all the tables you want to add to the query. Click **Close** when you're finished. Find the field you want to query (use the scroll bars) and drag the field down to the QBE grid. Repeat until you have added all the fields you want to include in the query. If you want to filter records, enter the criteria in the Criteria row. Close the query window, click **Yes** to save the query, enter a query name, and click **OK**.
- To Switch Views:** Click the **View** button on the toolbar.
- To Calculate Total Values:** Open the Query in Design View, select **View** → **Totals** from the menu, find the query field you want to calculate or group by, and select a calculation from the field's drop-down list.

Criteria Example	Description
"London"	Displays records where the field equals "London."
Between 1/1/00 and 12/31/00	Displays records where the date is between 1/1/00 and 12/31/00.
NOT "USA" or <> ""	Displays records where the field does not contain the text "USA" and is not blank.
Like "S*"	Displays records where the field text starts with an "S."
IS NULL	Displays records where the field is blank.
IS NOT NULL	Displays records where the field is not blank.
>100	Displays records whose field value is greater than 100.