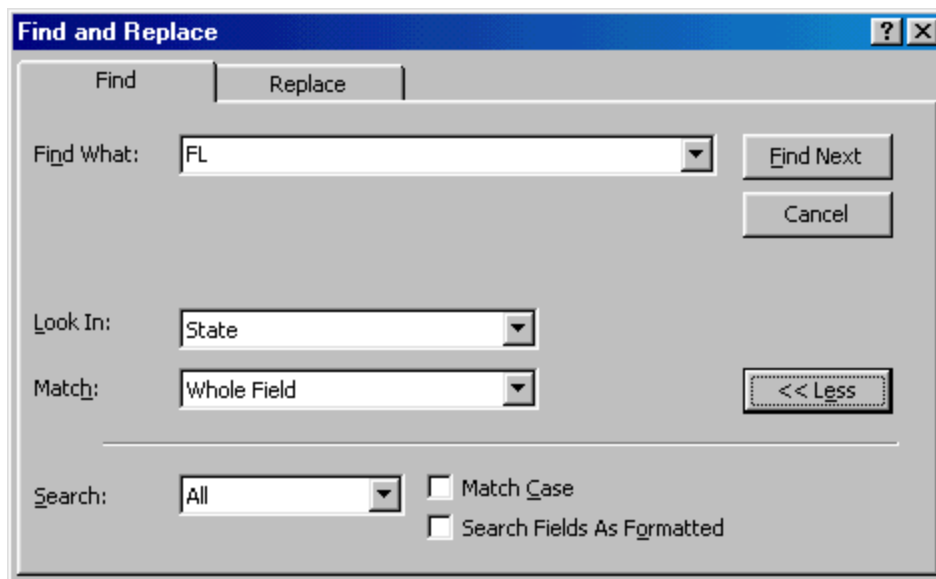


Finding Data in a Table

Data in a datasheet can be quickly located by using the **Find** command.

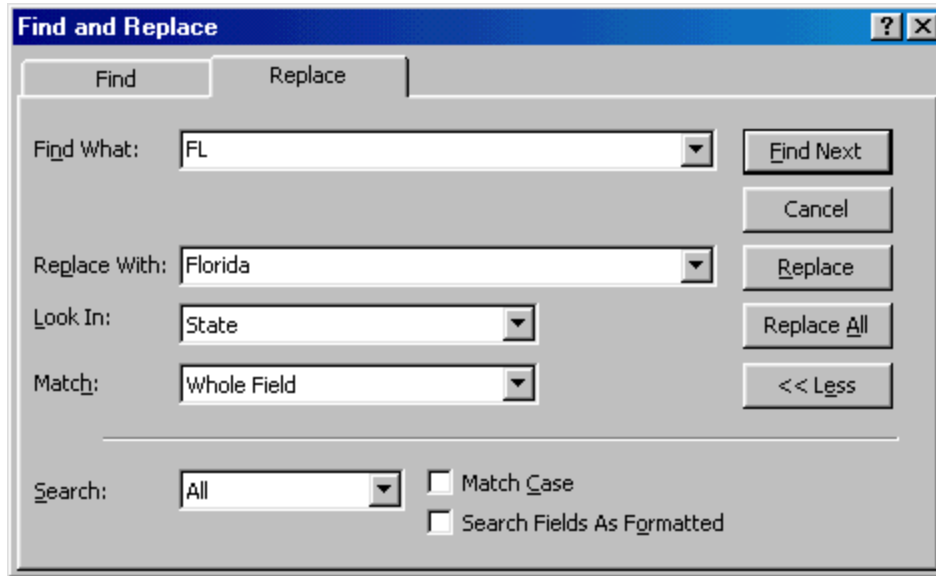
1. Open the table in datasheet view.
2. Place the cursor in any record in the field that you want to search and select **Edit|Find...** from the menu bar.
3. Enter the value criteria in the **Find What:** box.
4. From the **Look In:** drop-down menu, define the area of the search by selecting the entire table or just the field in the table you placed your cursor in during step 2.
5. Select the matching criteria from **Match:** to and click the **More >>** button for additional search parameters.
6. When all of the search criteria is set, click the **Find Next** button. If more than one record meets the criteria, keep clicking **Find Next** until you reach the correct record.



Replace

The replace function allows you to quickly replace a single occurrence of data with a new value or to replace all occurrences in the entire table.

1. Select **Edit|Replace...** from the menu bar (or click the **Replace** tab if the Find window is already open).
2. Follow the steps described in the Find procedure for searching for the data that should be replaced and type the new value of the data in the **Replace With:** box.
3. Click the **Find Next** button to step through occurrences of the data in the table and click the **Replace** button to make single replacements. Click **Replace All** to change all occurrences of the data in one step.



Check Spelling and AutoCorrect


The spell checker can be used to flag spelling errors in text and menu fields in a datasheet. Select **Tools|Spelling** from the menu bar to activate the spell checker and make corrections just as you would using Word or Excel. The AutoCorrect feature can automatically correct common spelling errors such as two INitial Capitals, capitalizing the first letter of the first word of a sentence, and anything you define. Select **Tools|AutoCorrect** to set these features.

Print a Datasheet

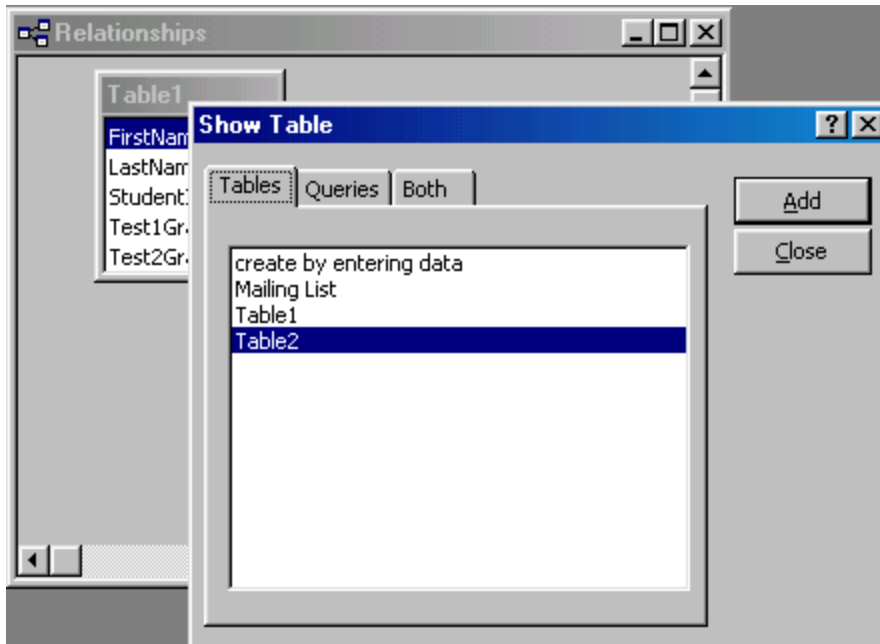
Datasheets can be printed by clicking the **Print** button on the toolbar or select **File|Print** to set more printing options.

Table Relationships

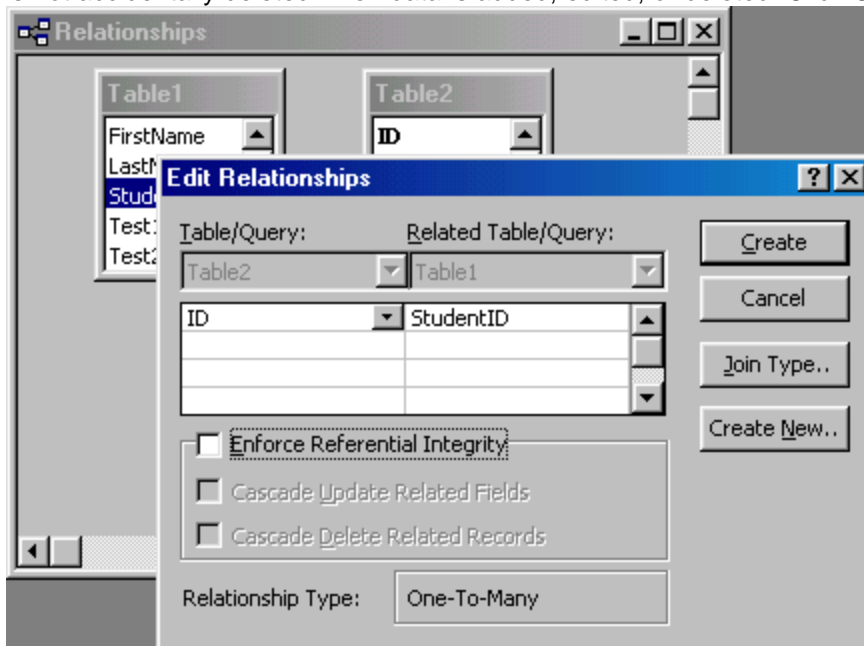
To prevent the duplication of information in a database by repeating fields in more than one table, table relationships can be established to link fields of tables together. Follow the steps below to set up a relational database:

1. Click the **Relationships** button on the toolbar. 
2. From the **Show Table** window (click the **Show Table** button on the toolbar to make it appear), double click on the names of the tables you would like to include in the relationships. When you have finished adding tables, click

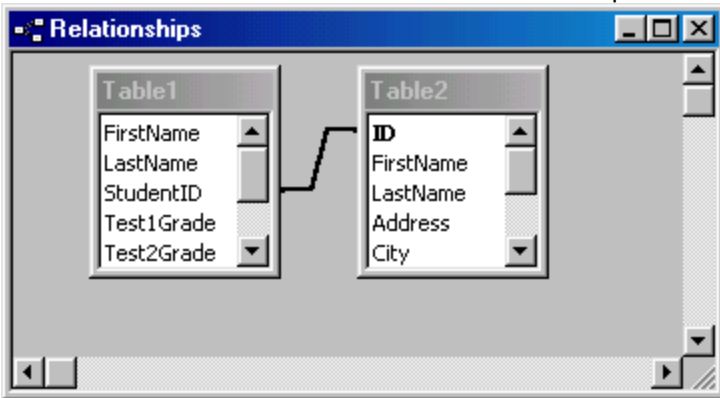
Close.



3. To link fields in two different tables, click and drag a field from one table to the corresponding field on the other table and release the mouse button. The **Edit Relationships** window will appear. From this window, select different fields if necessary and select an option from Enforce Referential Integrity if necessary. These options give Access permission to automatically make changes to referential tables if key records in one of the tables is deleted. Check the **Enforce Referential Integrity** box to ensure that the relationships are valid and that the data is not accidentally deleted when data is added, edited, or deleted. Click **Create** to create the link.



4. A line now connects the two fields in the Relationships window.



5. The datasheet of a relational table will provide expand and collapse indicators to view subdatasheets containing matching information from the other table. In the example below, the student address database and student grade database were related and the two can be shown simultaneously using the expand feature. To expand or collapse all subdatasheets at once, select **Format|Subdatasheet|Expand All** or **Collapse All** from the toolbar.

ID	First Name	Last Name	Address
977422811	John	Smith	123 Main Street Ft.
	Test1Grade	Test2Grade	Test3Grade
	95	85	90
	0	0	0
1002552704	Jane	Jones	456 Elm Ave. Ft.
(AutoNumber)			

Sorting and filtering allow you to view records in a table in a different way either by reordering all of the records in the table or view only those records in a table that meet certain criteria that you specify.



Sorting

You may want to view the records in a table in a different order than they appear such as sorting by a date or in alphabetical order, for example. Follow these steps to execute a simple sort of records in a table based on the values of one field:

1. In table view, place the cursor in the column that you want to sort by.
2. Select **Records|Sort|Sort Ascending** or **Records|Sort|Sort Descending** from the menu bar or click the **Sort Ascending** or **Sort Descending** buttons on the toolbar.

To sort by more than one column (such as sorting by date and then sorting records with the same date alphabetically), highlight the columns by clicking and dragging the mouse over the field labels and select one of the sort methods stated above.



Filter by Selection

This feature will filter records that contain identical data values in a given field such as filtering out all of the records that have the value "Smith" in a name field. To Filter by Selection, place the cursor in the field that you want to filter the other

records by and click the **Filter by Selection** button on the toolbar or select **Records|Filter|Filter By Selection** from the menu bar. In the example below, the cursor is placed in the City field of the second record that displays the value "Ft. Myers" so the filtered table will show only the records where the city is Ft. Myers.

	Last Name	First Name	Address	City	State	ID
	Smith	John	123 Main Street	Ft. Myers	FL	33
▶	Smith	Sally	123 Main Street	Ft. Myers	FL	33
	Jones	Mark	492 W. 21st Av	Naples	FL	33
*						

Record: 2 of 3

Filter by Form

If the table is large, it may be difficult to find the record that contains the value you would like to filter by so using Filter by Form may be advantageous instead. This method creates a blank version of the table with drop-down menus for each field that each contain the values found in the records of that field. Under the default **Look for** tab of the Filter by Form window, click in the field to enter the filter criteria. To specify an alternate criteria if records may contain one of two specified values, click the **Or** tab at the bottom of the window and select another criteria from the drop-down menu. More **Or** tabs will appear after one criteria is set to allow you to add more alternate criteria for the filter. After you have selected all of the criteria you want to filter, click the **Apply Filter** button on the toolbar.

	Address	Last Name	Mailing ListID	First Name	City
▶	"123 Main St				

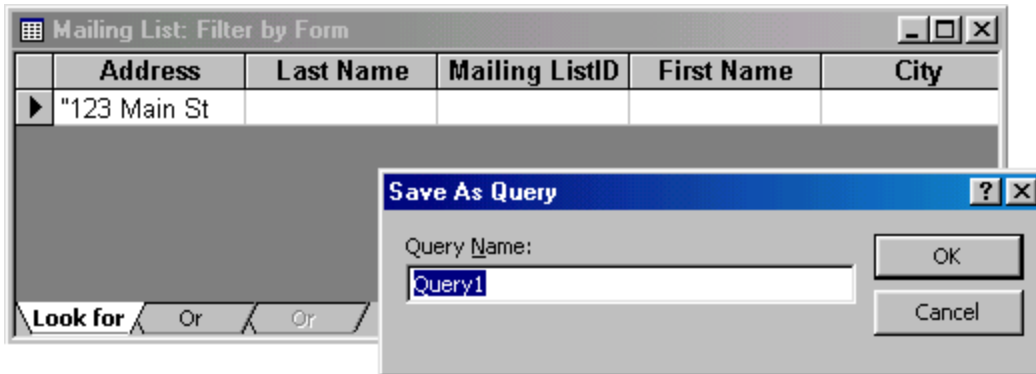
Look for / Or

The following methods can be used to select records based on the record selected by that do not have exactly the same value. Type these formats into the field where the drop-down menu appears instead of selecting an absolute value.

Filter by Form	
Format	Explanation
Like "**Street"	Selects all records that end with "Street"
<="G"	Selects all records that begin with the letters A through G
>1/1/00	Selects all dates since 1/1/00
<> 0	Selects all records not equal to zero

Saving A Filter

The filtered contents of a table can be saved as a query by selecting **File|Save As Query** from the menu bar. Enter a name for the query and click **OK**. The query is now saved within the database.



Remove a Filter

To view all records in a table again, click the depressed **Apply Filter** toggle button on the toolbar.

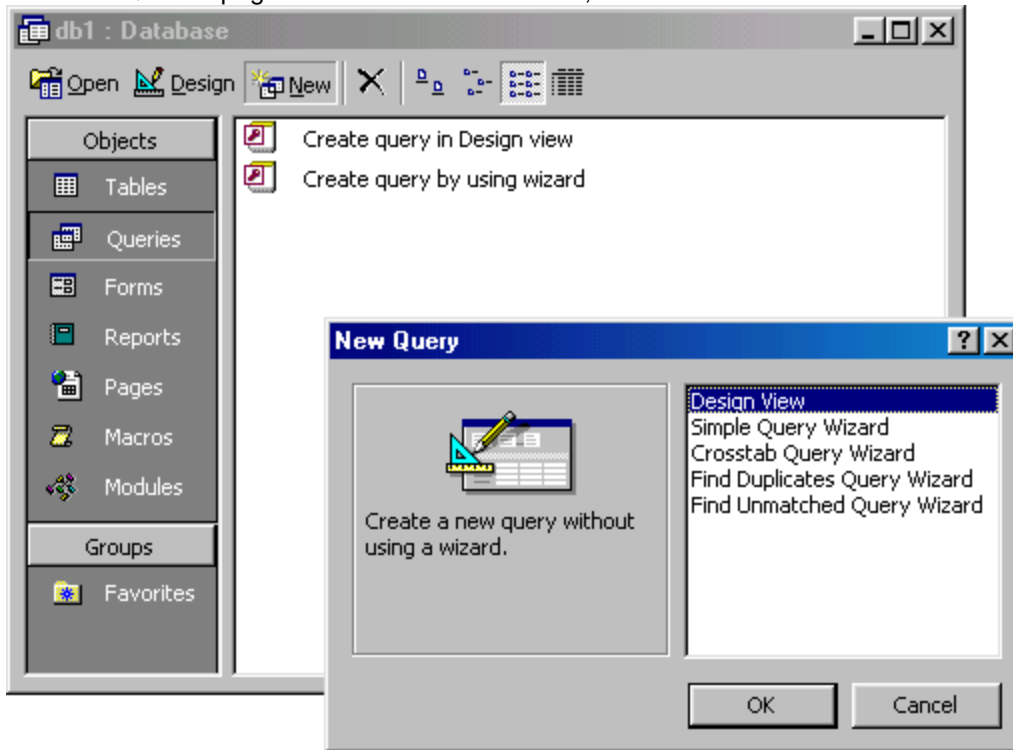
Introduction to Queries

Queries select records from one or more tables in a database so they can be viewed, analyzed, and sorted on a common datasheet. The resulting collection of records, called a **dynaset** (short for dynamic subset), is saved as a database object and can therefore be easily used in the future. The query will be updated whenever the original tables are updated. Types of queries are **select queries** that extract data from tables based on specified values, **find duplicate** queries that display records with duplicate values for one or more of the specified fields, and **find unmatched** queries display records from one table that do not have corresponding values in a second table.

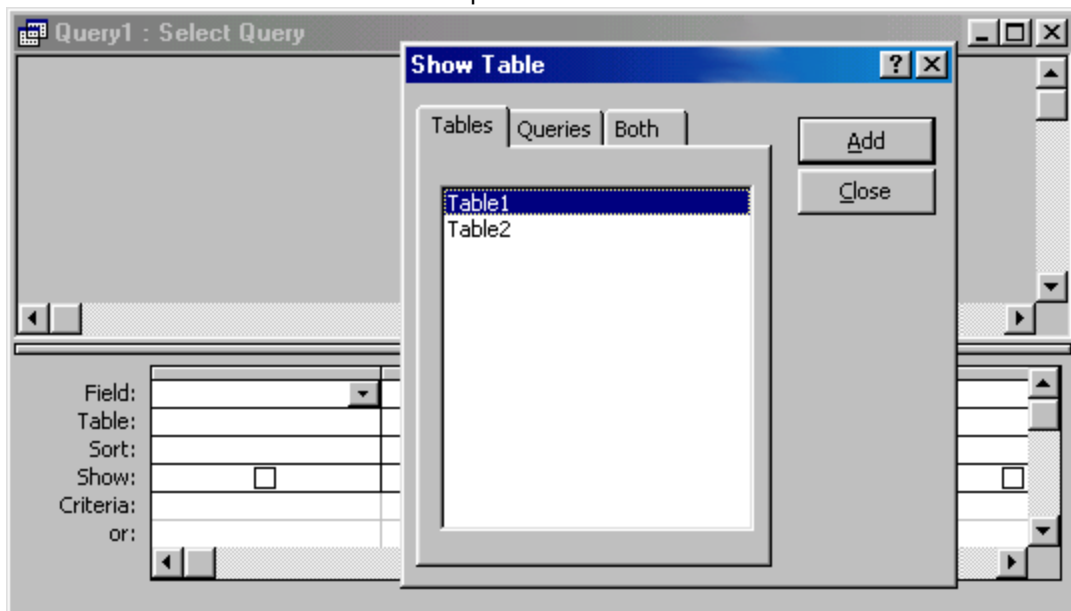
Create a Query in Design View

Follow these steps to create a new query in Design View:

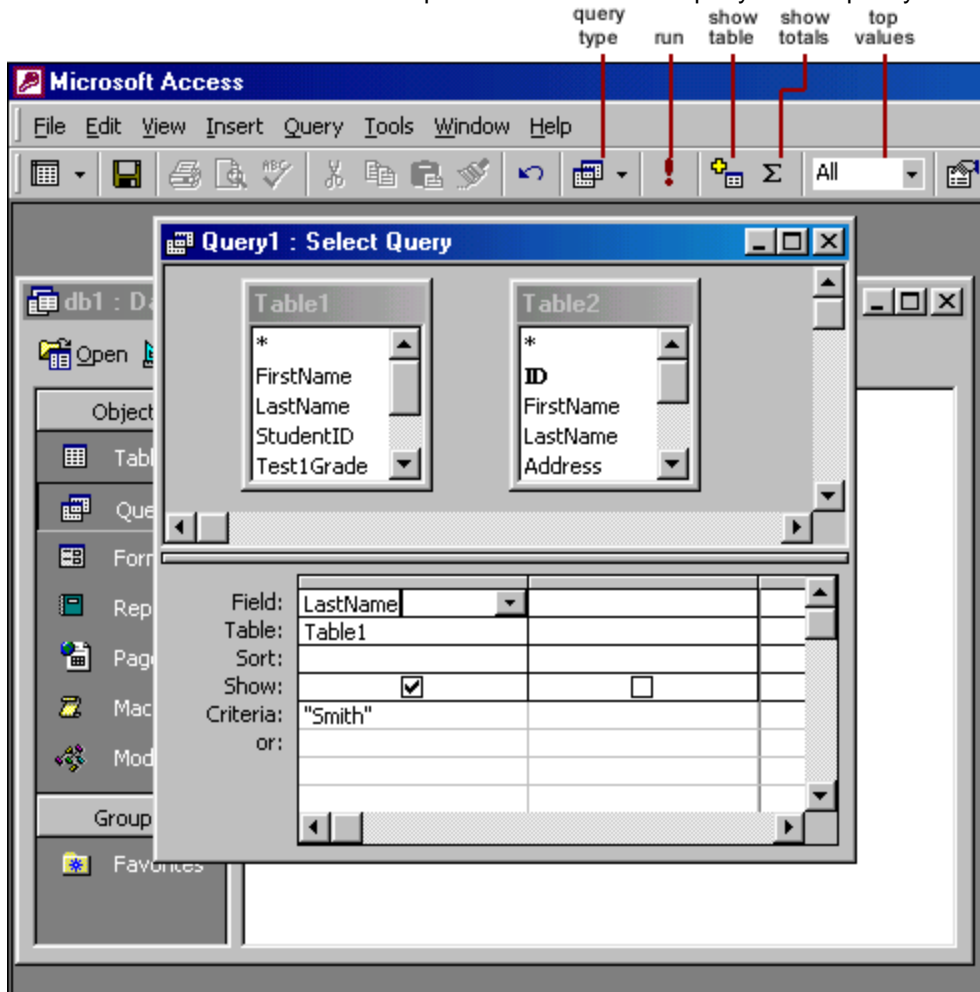
1. From the Queries page on the Database Window, click the **New** button.




2. Select Design View and click **OK**.
3. Select tables and existing queries from the **Tables** and **Queries** tabs and click the **Add** button to add each one to the new query.
4. Click **Close** when all of the tables and queries have been selected.



5. Add fields from the tables to the new query by double-clicking the field name in the table boxes or selecting the field from the **Field:** and **Table:** drop-down menus on the query form. Specify sort orders if necessary.



6. Enter the criteria for the query in the **Criteria:** field. The following table provides examples for some of the wildcard symbols and arithmetic operators that may be used. The **Expression Builder**  can also be used to assist in writing the expressions.

Query Wildcards and Expression Operators	
Wildcard / Operator	Explanation
? Street	The question mark is a wildcard that takes the place of a single letter.
43th *	The asterisk is the wildcard that represents a number of characters.
<100	Value less than 100
>=1	Value greater than or equal to 1
<>"FL"	Not equal to (all states besides Florida)
Between 1 and 10	Numbers between 1 and 10
Is Null	Finds records with no value
Is Not Null	or all records that have a value
Like "a*"	All words beginning with "a"
>0 And <=10	All numbers greater than 0 and less than 10

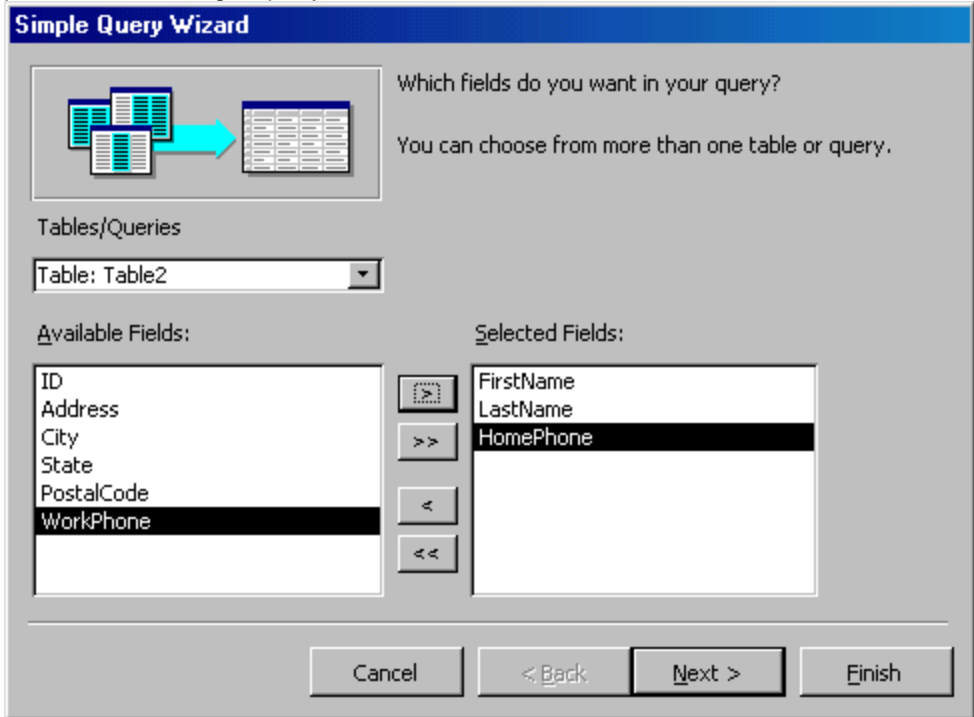
"Bob" Or "Jane" Values are Bob or Jane

- 7.
8. After you have selected all of the fields and tables, click the **Run** button on the toolbar.
9. Save the query by clicking the **Save** button.

Query Wizard

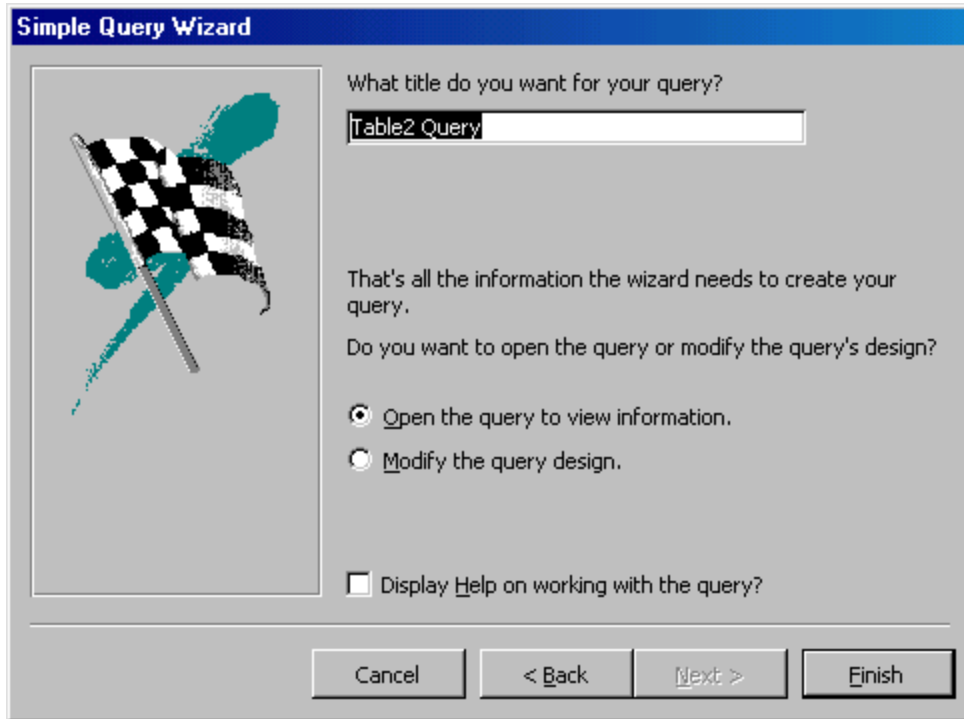
Access' Query Wizard will easily assist you to begin creating a select query.

1. Click the **Create query by using wizard** icon in the database window to have Access step you through the process of creating a query.



2. From the first window, select fields that will be included in the query by first selecting the table from the drop-down **Tables/Queries** menu. Select the fields by clicking the > button to move the field from the Available Fields list to Selected Fields. Click the double arrow button >> to move all of the fields to Selected Fields. Select another table or query to choose from more fields and repeat the process of moving them to the Selected Fields box. Click **Next**

> when all of the fields have been selected.

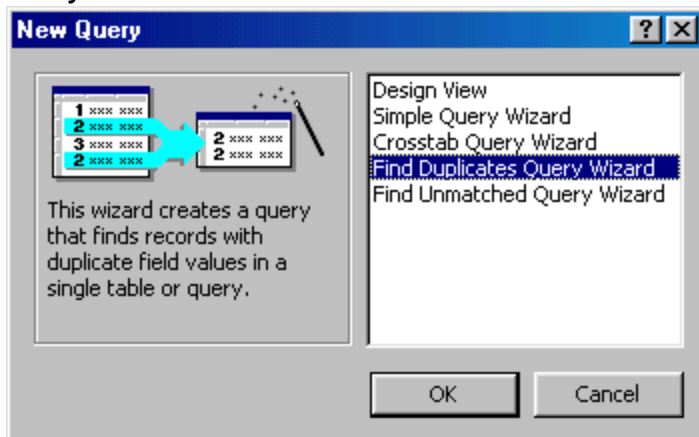


3. On the next window, enter the name for the query and click **Finish**.
4. Refer to steps 5-8 of the previous tutorial to add more parameters to the query.

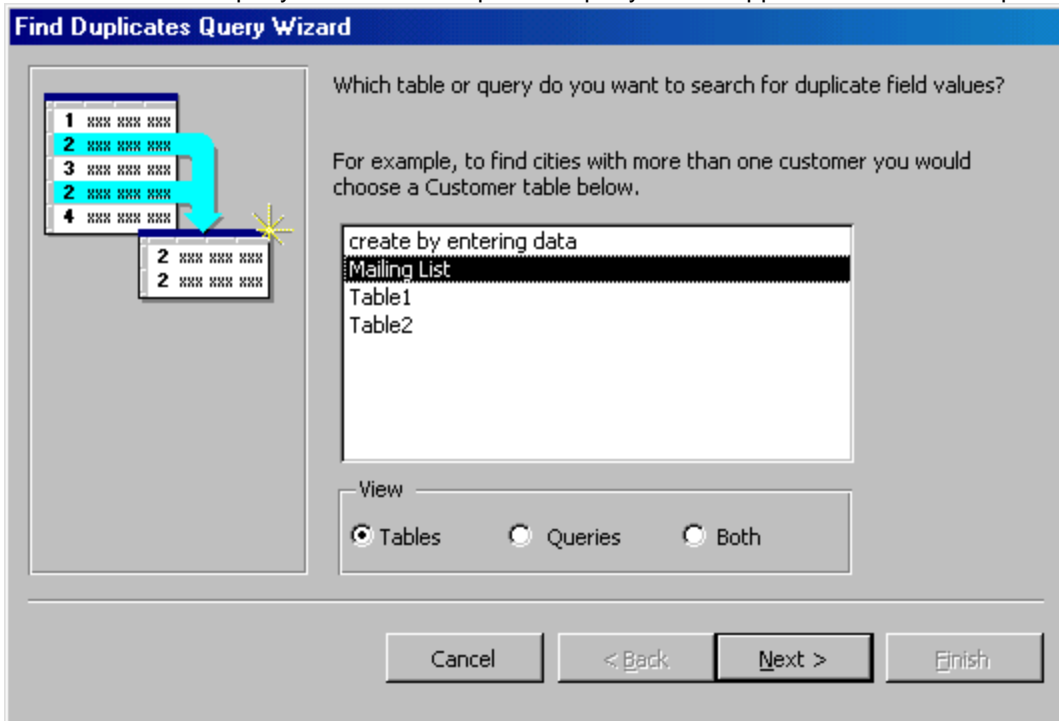
Find Duplicates Query

This query will filter out records in a single table that contain duplicate values in a field.

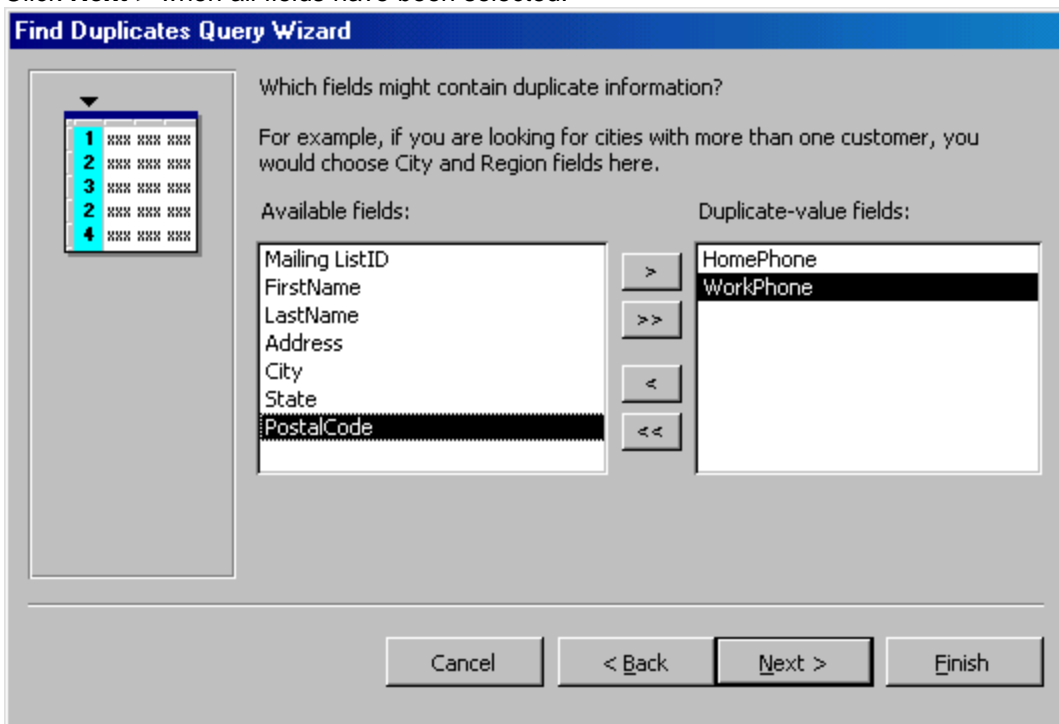
1. Click the **New** button on the Queries database window, select **Find Duplicates Query Wizard** from the **New Query** window and click **OK**.



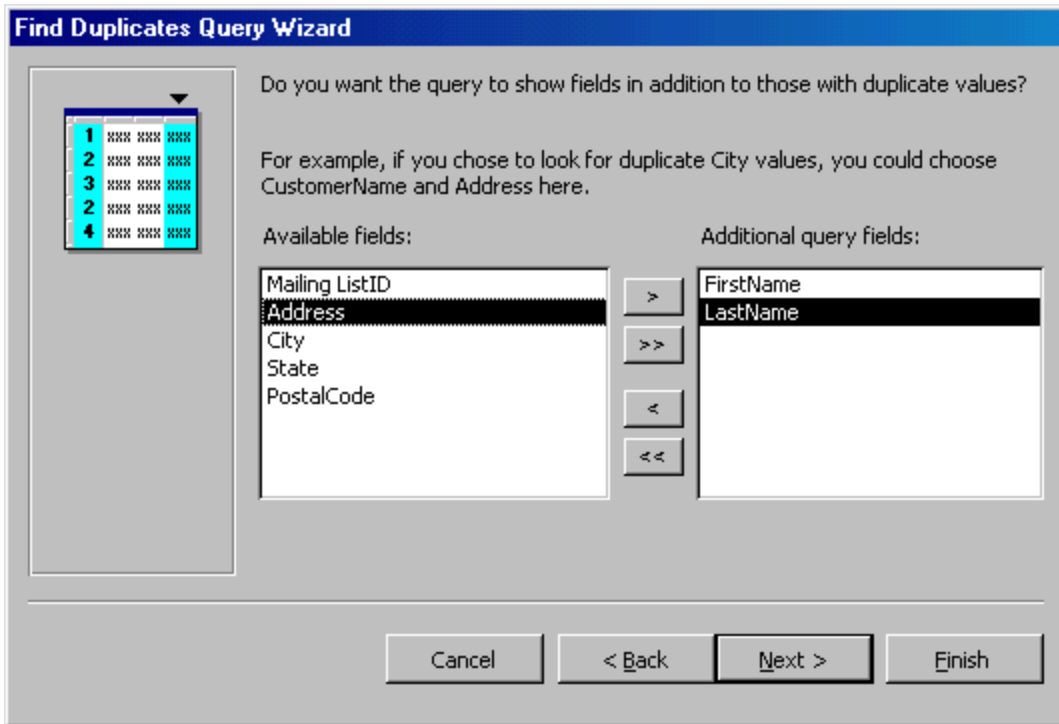
- Select the table or query that the find duplicates query will be applied to from the list provided and click **Next >**.



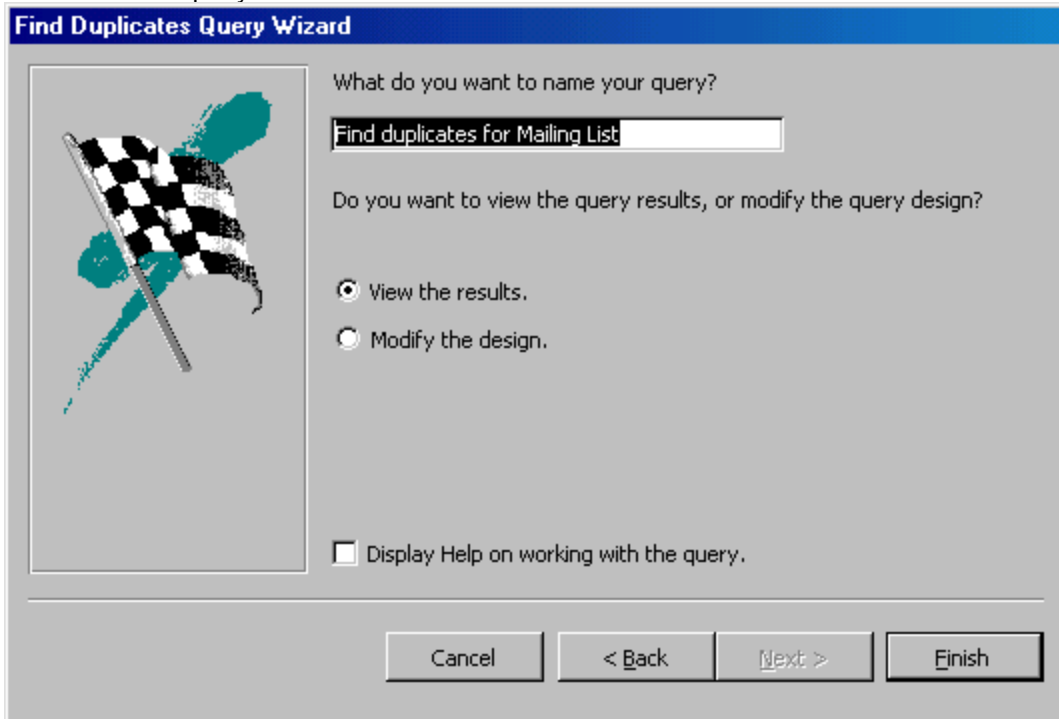
- Select the fields that may contain duplicate values by highlighting the names in the Available fields list and clicking the > button to individually move the fields to the Duplicate-value fields list or >> to move all of the fields. Click **Next >** when all fields have been selected.



- Select the fields that should appear in the new query along with the fields selected on the previous screen and click **Next >**.



- Name the new query and click **Finish**.



Delete a Query

To delete a table from the query, click the table's title bar and press the **Delete** key on the keyboard.

Forms are used as an alternative way to enter data into a database table.