

Access 2007: Tables

Learning Guide

Tables

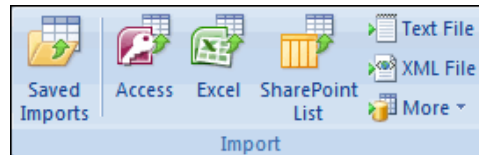
Access 2007 uses relational databases, which allow you to link information in multiple tables. This feature enables one specific category of information to be stored in each table and avoids repetitive data entry. This guide will show you advanced techniques for customizing tables, along with importing existing data into Access tables.

Importing Data into Access

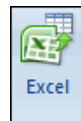
You can create databases from pre-existing spreadsheets and tables by importing or linking existing data into Access. These methods provide an efficient way to keep your data up to date.

Importing Data from an Excel Spreadsheet

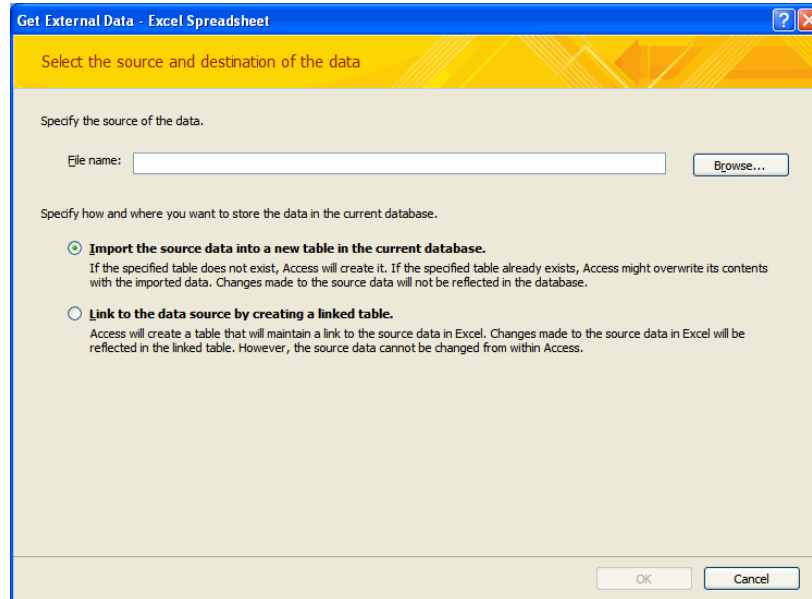
- From the **External Data** ribbon, locate the area labeled **Import**



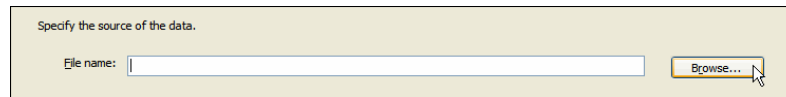
- Click on the button labeled **Excel**



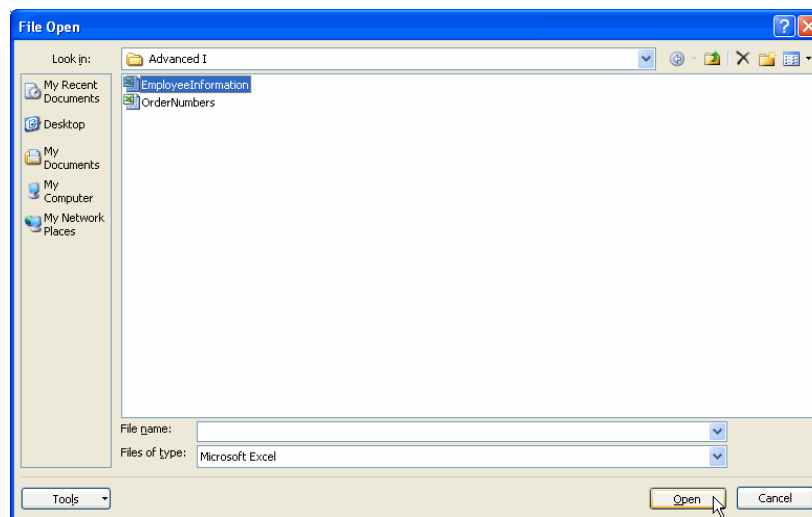
- The **Select the source and destination of the data** view of the **Get External Data – Excel Spreadsheet** window will appear



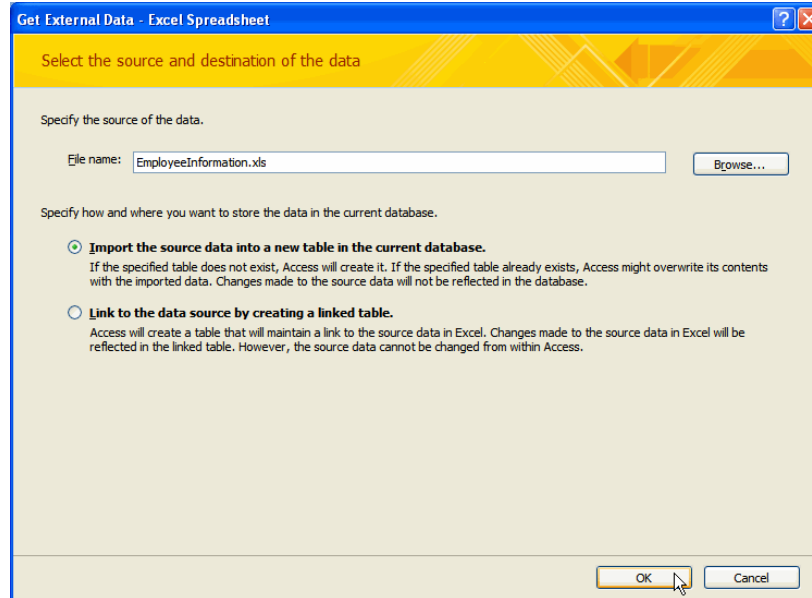
- From the **Specify the source of the data** area, click on the button labeled **Browse**



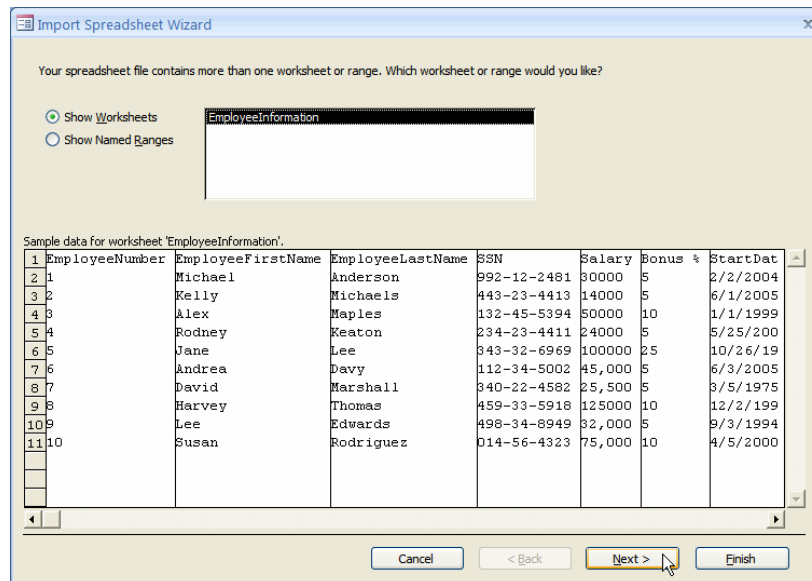
- The **File Open** window will appear
- Navigate to the file you wish to import data from
- Click on the button labeled **Open**



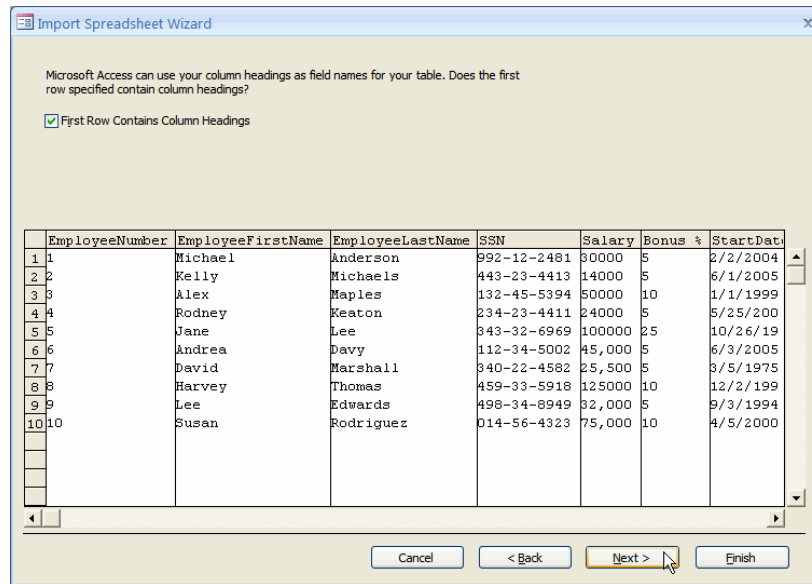
- The name of your file will appear in the box labeled **File name**
- Confirm that the option button labeled **Import the source data into a new table in the current database** is selected
- Click on the button labeled **OK**



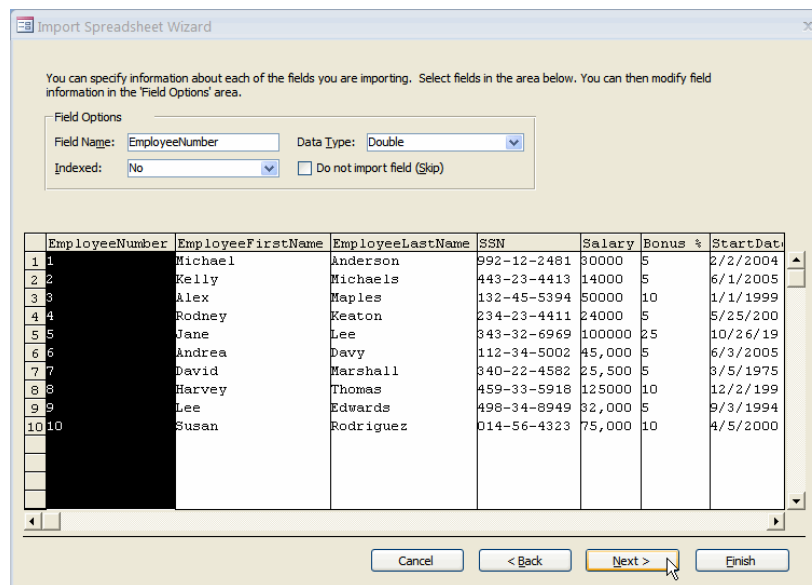
- The **Import Spreadsheet Wizard** window will appear
- Confirm that the spreadsheet containing your data is selected
- Click on the button labeled **Next**



- If applicable, click to place a check-mark in the box labeled **First Row Contains Column Headings**
- Click on the button labeled **Next**



- If you want to exclude information from your spreadsheet
 - Click on the name of the field you want to exclude
 - Click on the button labeled **Do no import field (Skip)**
 - Repeat the previous steps for each additional field you wish to exclude
- Click on the button labeled **Next**



- Click on one of the following option buttons to specify the primary key (a unique value used to identify each record in your table)

If you wish to ...	Click on ...
Let Access define your primary key	<input type="radio"/> Let Access add primary key
Choose your own primary key	<input checked="" type="radio"/> Choose my own primary key
Assign the primary key later	<input type="radio"/> No primary key

- Click on the button labeled **Next**

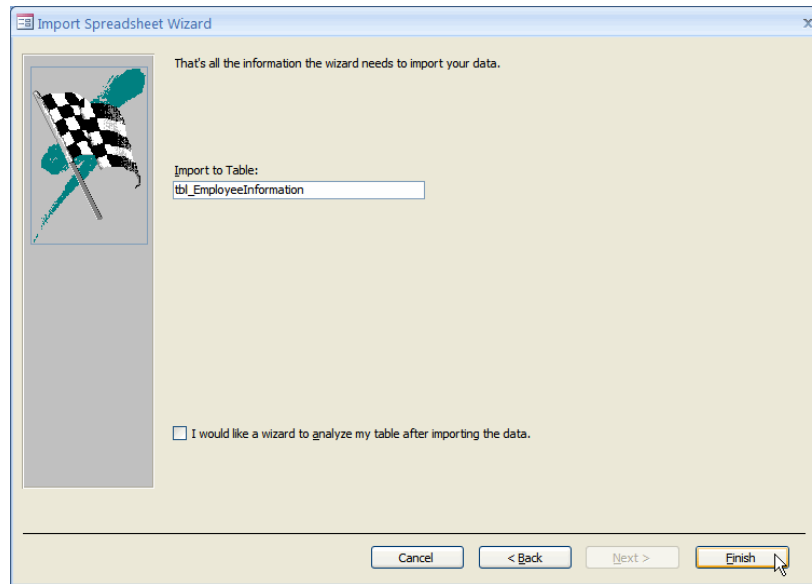
Microsoft Access recommends that you define a primary key for your new table. A primary key is used to uniquely identify each record in your table. It allows you to retrieve data more quickly.

Let Access add primary key.
 Choose my own primary key. EmployeeNumber
 No primary key.

	EmployeeNumber	EmployeeFirstName	EmployeeLastName	SSN	Salary	Bonus %	StartDate
1	1	Michael	Anderson	992-12-2481	30000	5	2/2/2004
2	2	Kelly	Michaels	443-23-4413	14000	5	6/1/2005
3	3	Alex	Maples	132-45-5394	50000	10	1/1/1999
4	4	Rodney	Keaton	234-23-4411	24000	5	5/25/200
5	5	Jane	Lee	343-32-6969	100000	25	10/26/19
6	6	Andrea	Davy	112-34-5002	45,000	5	6/3/2005
7	7	David	Marshall	340-22-4582	25,500	5	3/5/1975
8	8	Harvey	Thomas	459-33-5918	125000	10	12/2/199
9	9	Lee	Edwards	498-34-8949	32,000	5	9/3/1994
10	10	Susan	Rodriguez	014-56-4323	75,000	10	4/5/2000

Buttons: Cancel, < Back, **Next >**, Finish

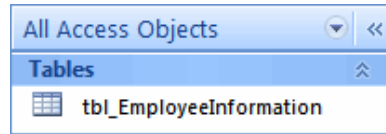
- In the box labeled **Import to Table**, type a descriptive name for the table you are importing (for example, tbl_EmployeeInformation)
- Click on the button labeled **Finish**



- The **Save Import Steps** view of the **Get External Data – Excel Spreadsheet** window will appear
- Click on the button labeled **Close**



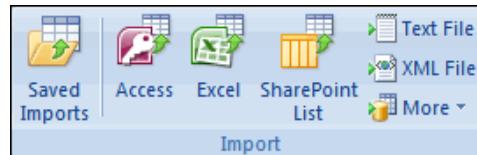
- Your table will appear in the **Navigation Pane**



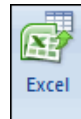
Inserting a Linked Table from Excel

A link is an action that establishes a connection to data from another application so that you can view and can edit the data in both the original application and in Access. To link a table from a separate file:

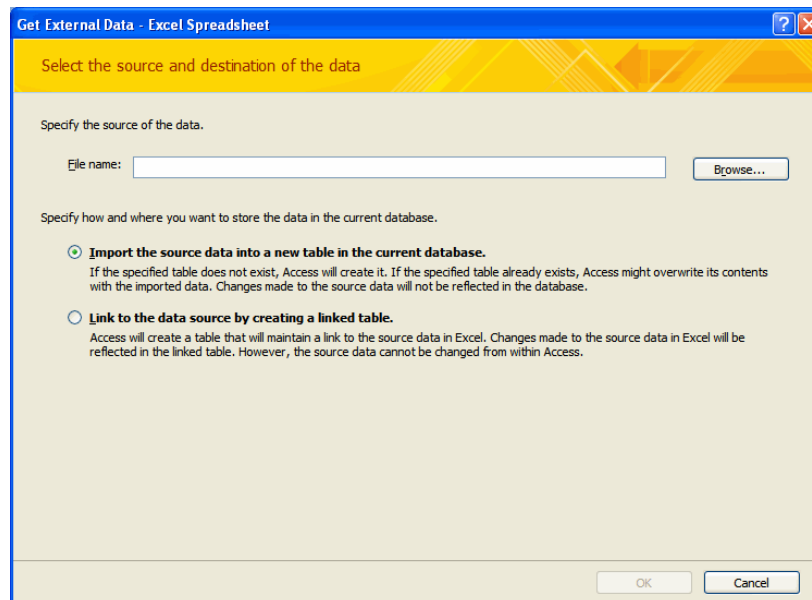
- From the **External Data** ribbon, locate the area labeled **Import**



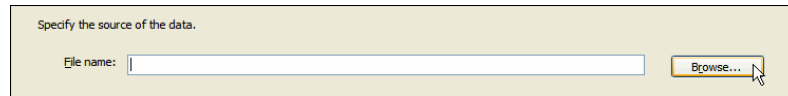
- Click on the button labeled **Excel**



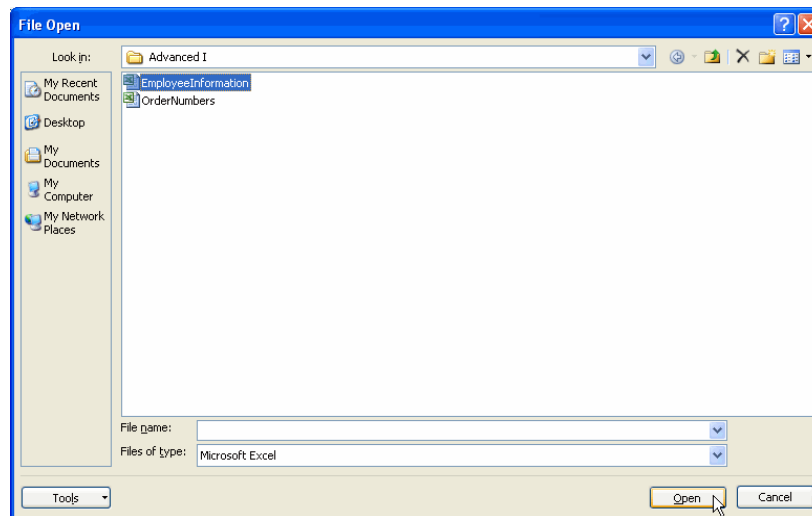
- The **Select the source and destination of the data** view of the **Get External Data – Excel Spreadsheet** window will appear



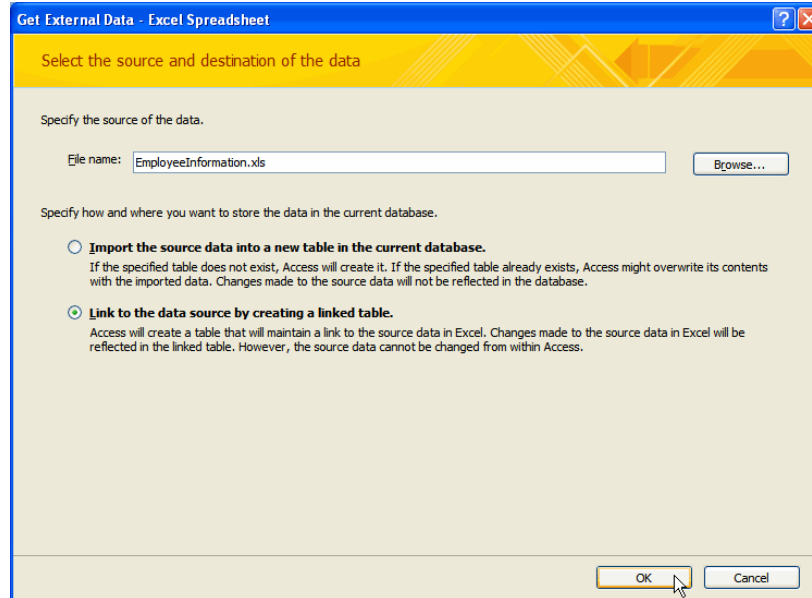
- From the **Specify the source of the data** area, click on the button labeled **Browse**



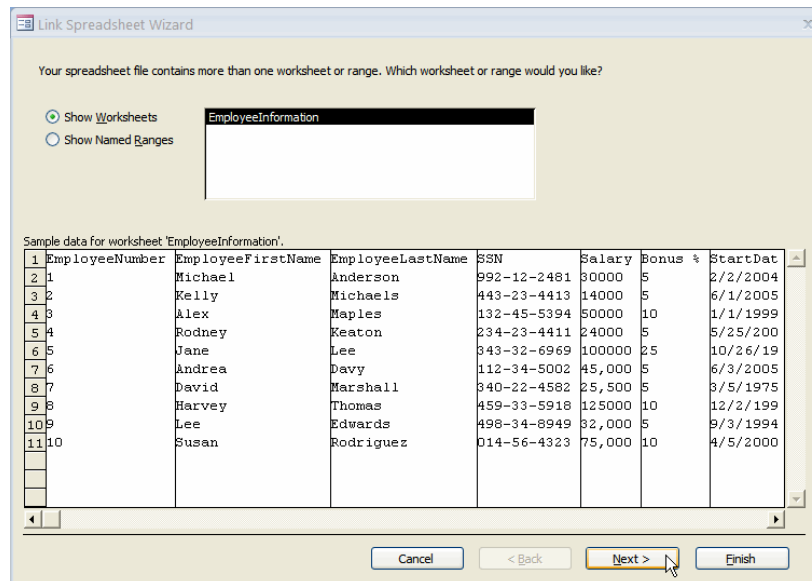
- The **File Open** window will appear
- Navigate to the file you wish to import data from
- Click on the button labeled **Open**



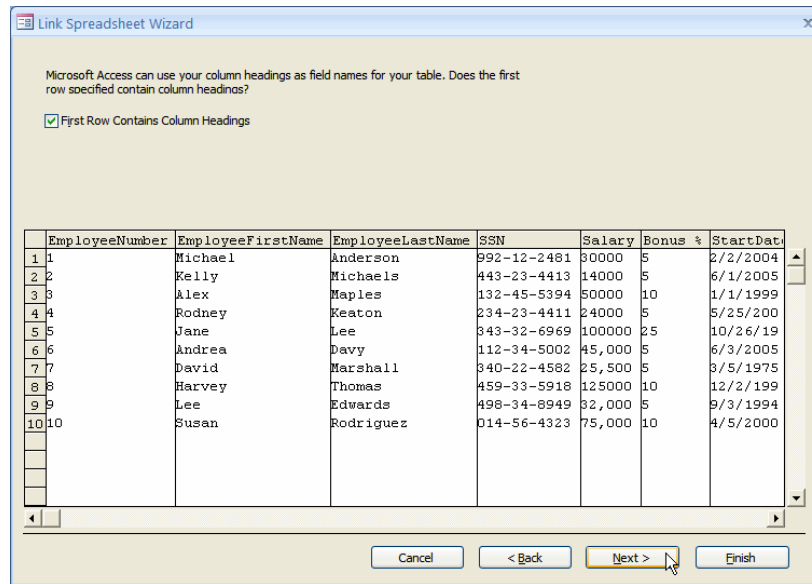
- The name of your file will appear in the box labeled **File name**
- Confirm that the option button labeled **Link to the data source by creating a linked table** is selected
- Click on the button labeled **OK**



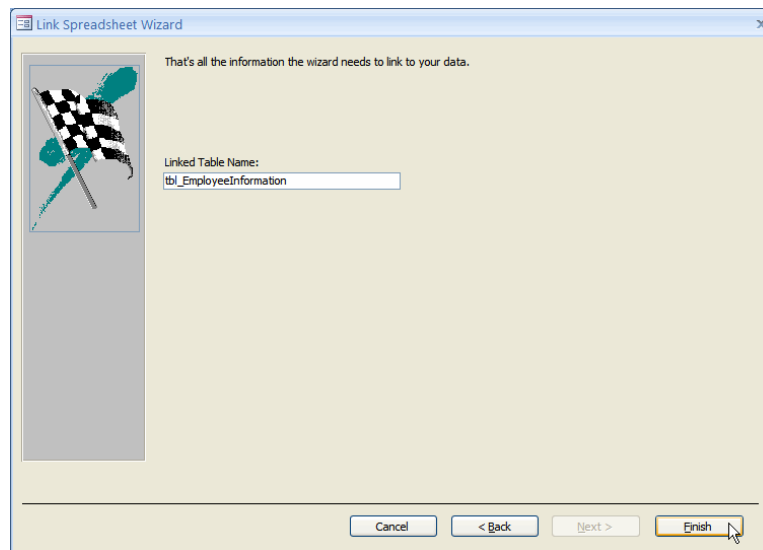
- The **Link Spreadsheet Wizard** window will appear
- Confirm that the spreadsheet containing your data is selected
- Click on the button labeled **Next**



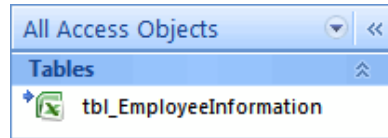
- If applicable, click to place a check-mark in the box labeled **First Row Contains Column Headings**
- Click on the button labeled **Next**



- In the box labeled **Linked Table Name**, type a descriptive name for the table you are linking (for example, tbl_EmployeeInformation)
- Click on the button labeled **Finish**



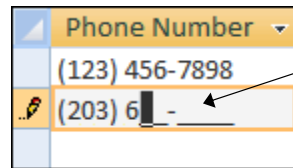
- A link to the selected table will appear in the Navigation pane (the linked table may be identified by a blue arrow to the left of the Excel icon)



Applying Field Properties

Creating an Input Mask

Sometimes called a field template, an input mask consists of literal display characters (such as parentheses, periods, and hyphens) that format data and provide some control over what values may be entered into a field. In the following example, an input mask requires that all phone number entries contain exactly enough digits to make up a U.S. area code and telephone number.



If a field has an input mask, you enter data into the blanks

To create an input mask:

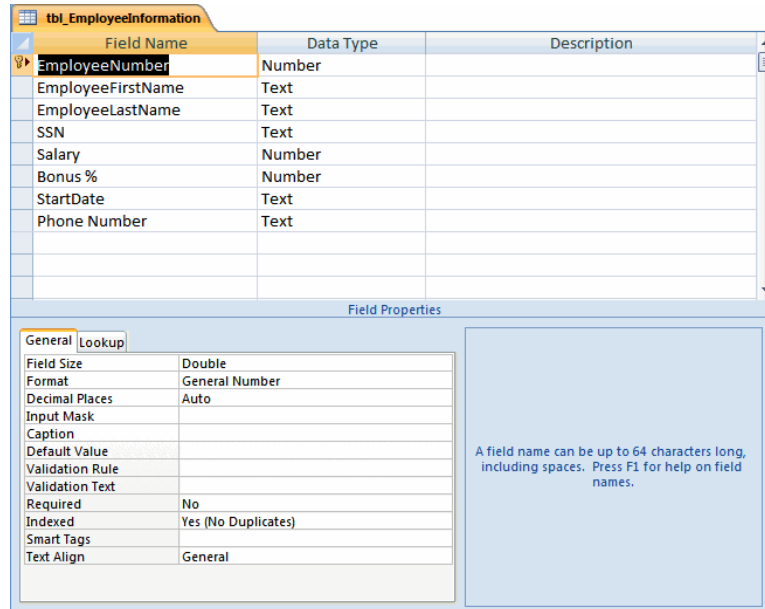
- From the Navigation pane, double-click on the name of the table you wish to customize
- From the **Home** ribbon, locate the area labeled **Views**



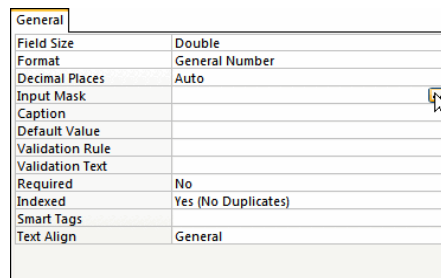
- Click on the button labeled **View**



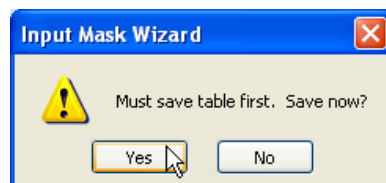
- The **Design** view of your table will appear



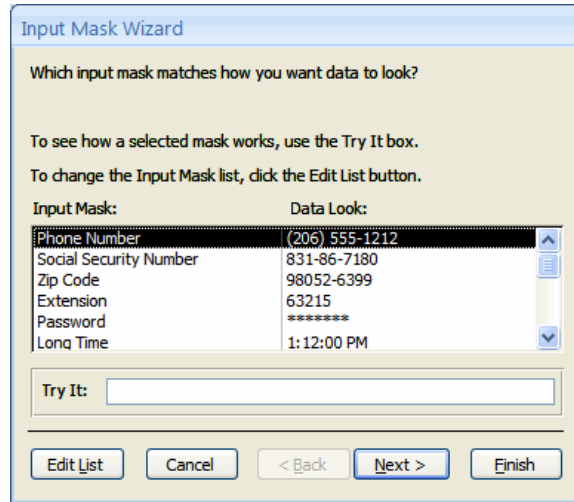
- In the column labeled Field Name, select the field to which you wish to add an input mask
- Click on the tab labeled **General**
- Click in the box labeled **Input Mask**
- Click on the . . . button that appears to the right of the field



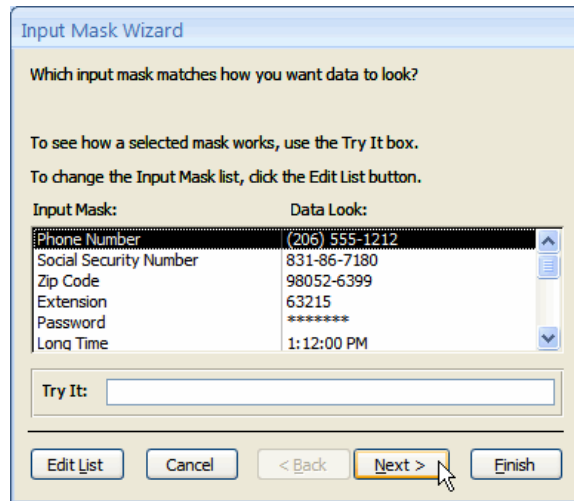
- The **Input Mask Wizard** window will appear
- Click on the button labeled **Yes** to save your table



- The **Input Mask Wizard** window will appear



- From the list that appears, select the input mask that you would like to use (for example, Phone Number)
- Click on the button labeled **Next**



- Confirm that _ appears next to the box labeled **Placeholder character**
- Click on the button labeled **Next**

Input Mask Wizard

Do you want to change the input mask?

Input Mask Name: Phone Number

Input Mask: (999) 000-0000

What placeholder character do you want the field to display?
Placeholders are replaced as you enter data into the field.

Placeholder character: _

Try It:

Cancel < Back Next > Finish

- Click on the option button labeled with the storage type you prefer (for example, with the symbols in the mask)
- Click on the button labeled **Next**

Input Mask Wizard

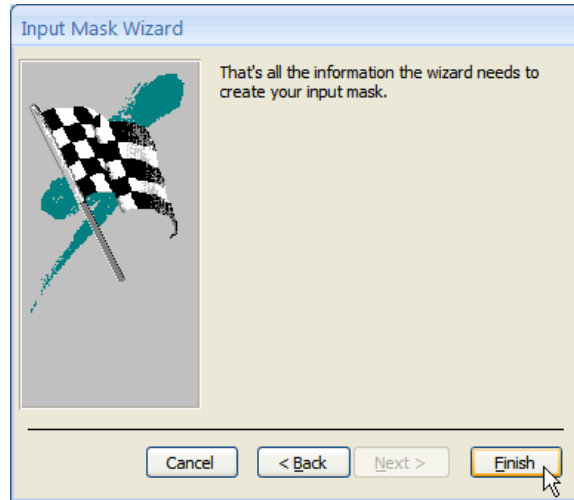
How do you want to store the data?

With the symbols in the mask, like this:
(254) 316-8517

Without the symbols in the mask, like this:
4442315281

Cancel < Back Next > Finish

- Click on the button labeled **Finish**



- Access will return to the **Design** view window and will display the syntax of your input mask in the **Input Mask** field under the tab labeled **General**

General	
Field Size	255
Format	
Input Mask	!(999) 000\-0000;0;_
Caption	

Requiring Field Data Entry

To ensure that data is entered into a specific field:

- Click on the tab labeled **General**
- Click in the field labeled **Required**
- Click on the down-facing arrow that appears to the right of the field
- From the drop-down menu that appears, select **Yes**

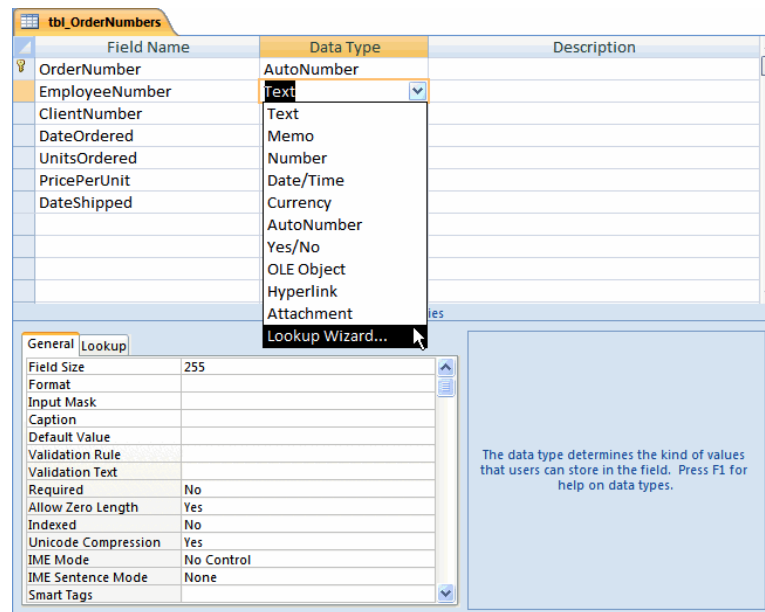
General	
Field Size	255
Format	
Input Mask	!(999) 000\-0000;0;_
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	No
IME Mode	No Control
IME Sentence Mode	None
Smart Tags	

Creating a Lookup Column

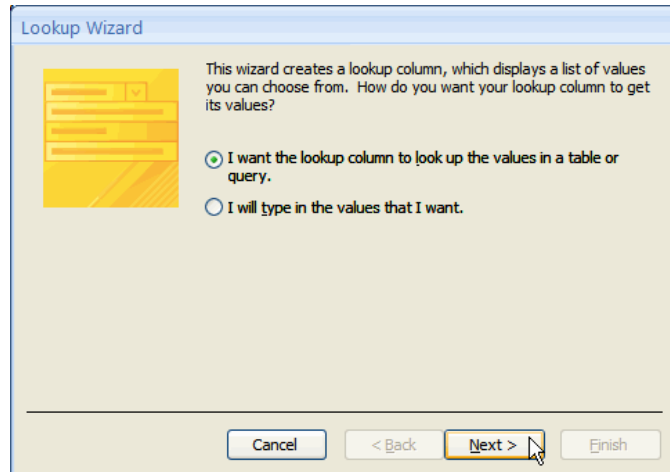
A lookup column(s) displays a list of values to choose from when entering data into a field. A lookup column may be created from an existing table or by entering values.

Creating a Lookup Column from an Existing Table

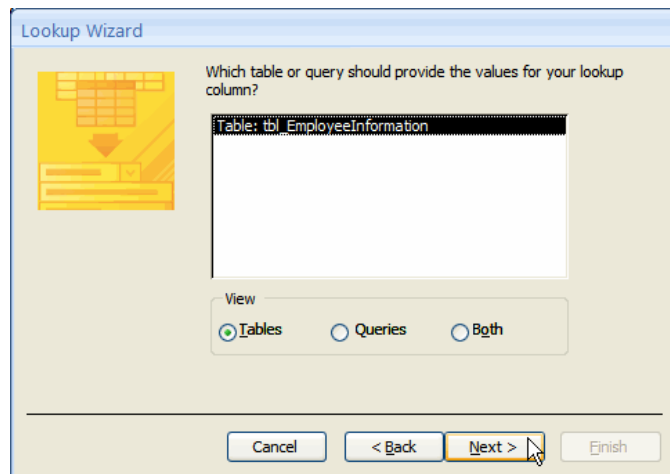
- Open up your table in **Design View**
- Locate the name the of the field you wish to edit (for example, EmployeeNumber)
- Click on the down-facing arrow next to the data type of the field
- From the drop-down menu that appears, select **Lookup Wizard**



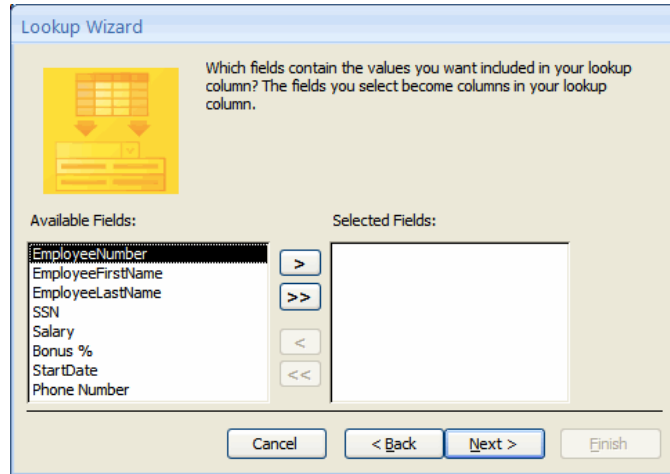
- The **Lookup Wizard** window will appear
- Click on the option button labeled **I want the lookup column to look up the values in a table or query**
- Click on the button labeled **Next**



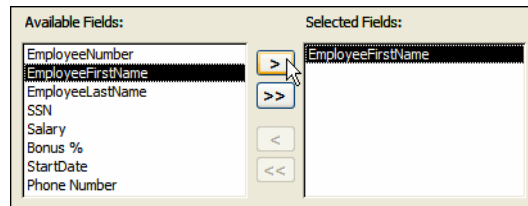
- A list of the tables in your database (excluding the table you are editing) will appear
- Click on the name of the table that contains the data you wish to use in your lookup column (for example, tbl_EmployeeInformation)
- Click on the button labeled **Next**



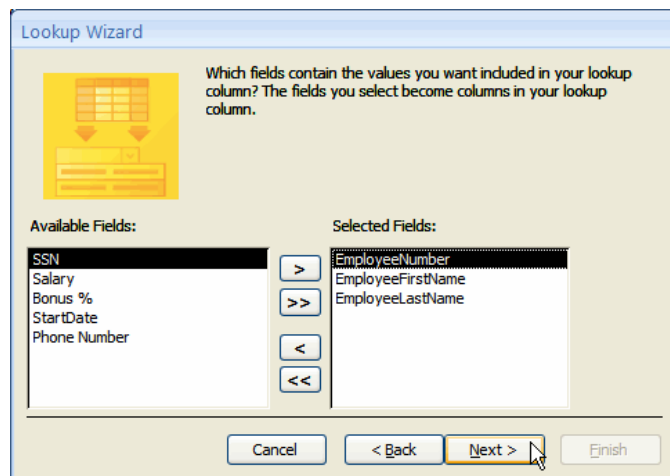
- A list of the fields in the table you selected will appear



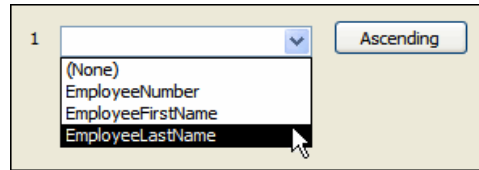
- In the box labeled **Available Fields**, click on the name of the field you wish to include in your lookup column
- Click on the button labeled >
- Your field name will appear in the box labeled **Selected Fields**



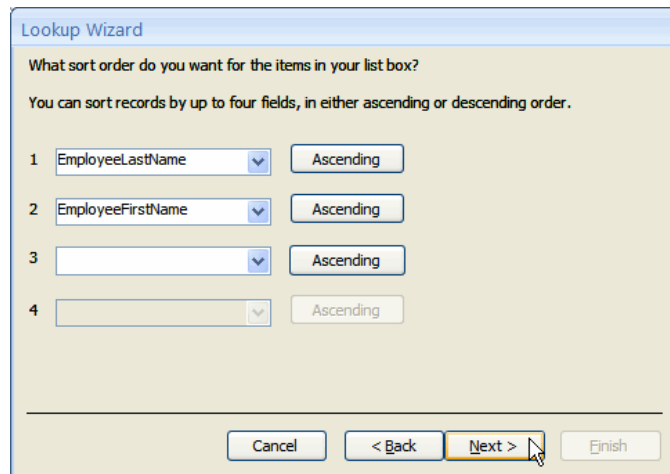
- Repeat the previous steps until you have added all desired fields
- Click on the button labeled **Next**



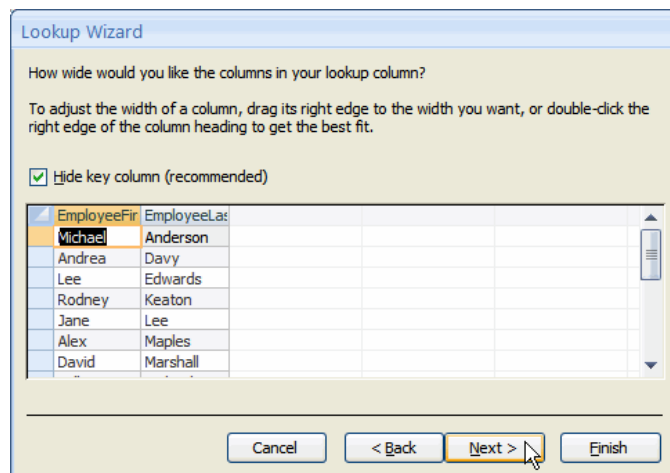
- Click on the down-facing arrow next to the box labeled **1**
- From the list that appears, select the field you wish to sort



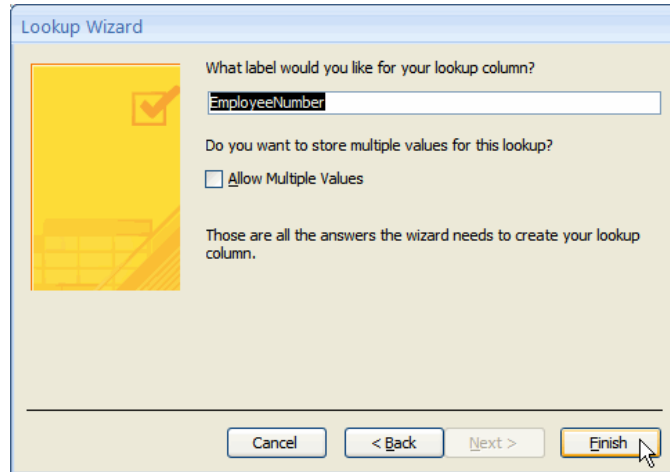
- Repeat the previous steps until you have selected all fields you wish to sort
- Click on the button labeled **Next**



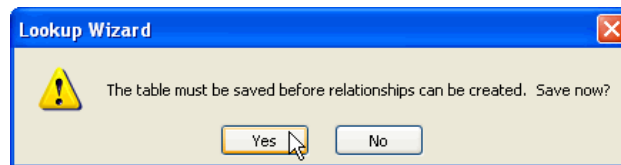
- If necessary, adjust the width of the columns in your lookup table
- Click on the button labeled **Next**



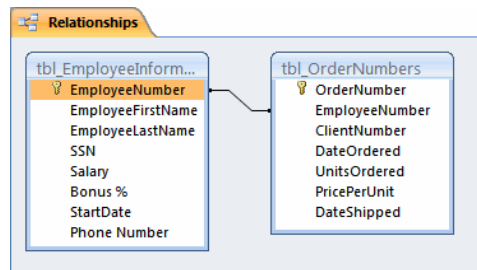
- If desired, change the label for your lookup column
- Click on the button labeled **Finish**



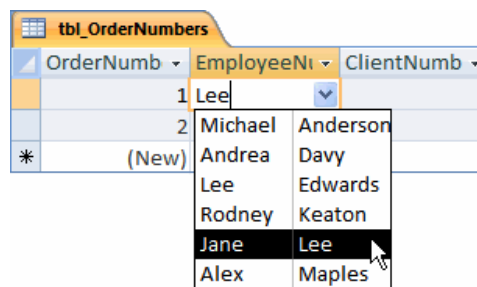
- Save your table by clicking on the button labeled **Yes**



- A relationship will automatically be created between the tables



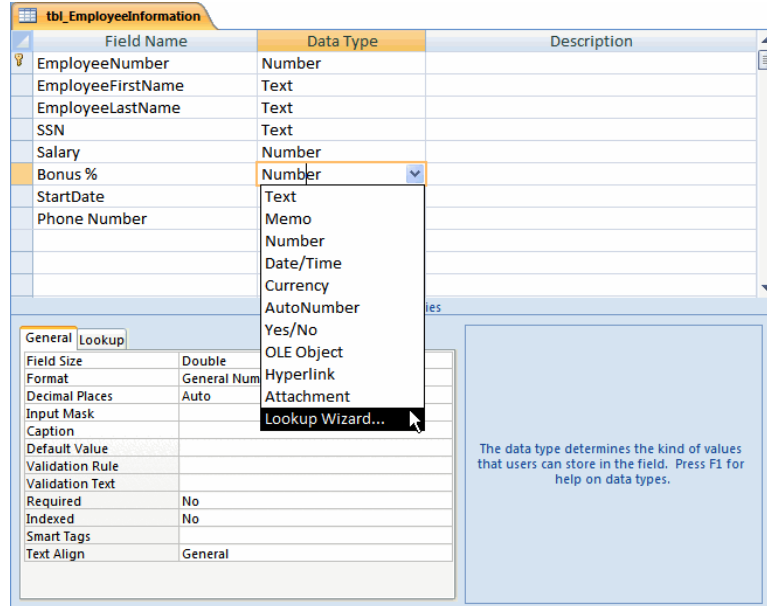
- Navigate to the Datasheet view of your table
- Your lookup column will be available to use for data entry



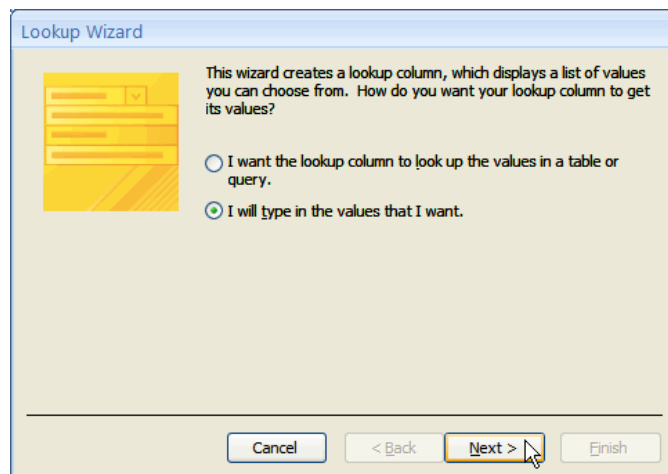
Creating a Lookup Column by Entering in Values

A value list should only be used for values that will not change very often and that do not need to be stored in a table. For example, a list for bonus percentages would work well in this type of lookup column.

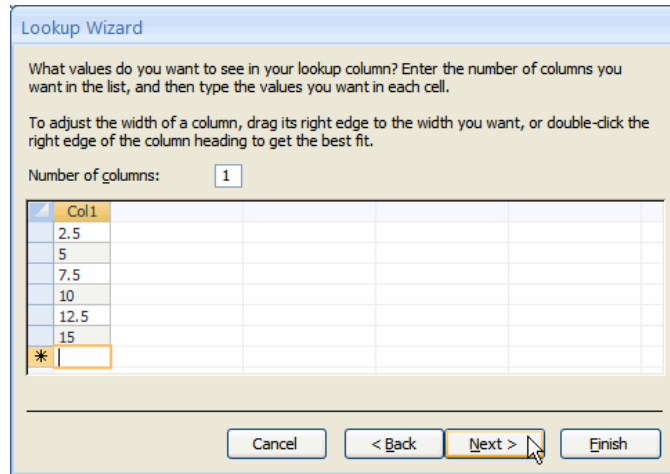
- Locate the name of the field you wish to edit (for example, Bonus%)
- Click on the down-facing arrow next to the field name
- From the drop-down menu that appears, select **Lookup Wizard**



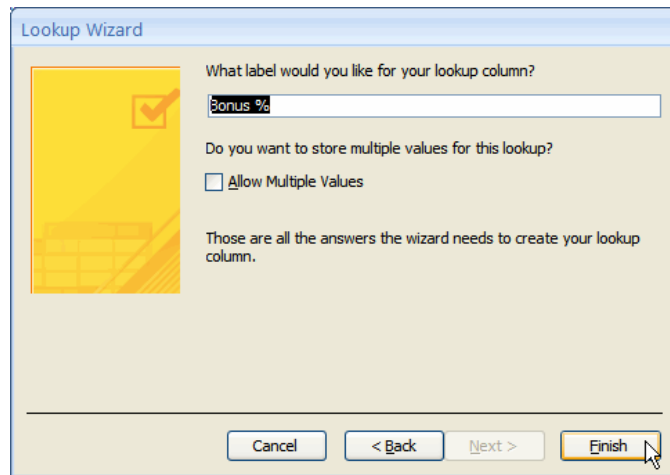
- The **Lookup Wizard** window will appear
- Click on the option button labeled **I will type in the values that I want**
- Click on the button labeled **Next**



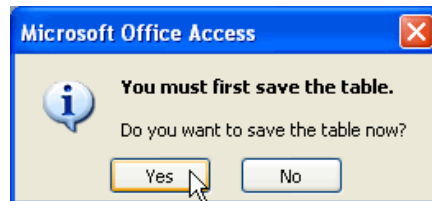
- Type the values you wish to appear in the lookup column
- If necessary, adjust the width of the column
- Click on the button labeled **Next**



- If desired, change the label for your lookup column
- Click on the button labeled **Finish**



- Navigate to the Datasheet view of your table
- If necessary, click on the button labeled **Yes** to save your table



- Your lookup column will be available to use for data entry

tbl_EmployeeInformation						
	EmployeeNo	EmployeeFir	EmployeeLa	SSN	Salary	Bonus %
+	1	Michael	Anderson	992-12-2481	30000	2.5
+	2	Kelly	Michaels	443-23-4413	14000	5