

CHAPTER 3: DATASHEET VIEW


“It is a capital mistake to theorize before one has data.”

– Sir Arthur Conan Doyle, *Scandal in Bohemia*

The Datasheet view, also known as the Table view, displays data in tabular form. Once a table has been created, the next step is to add data to the table. In practice, entering data is not commonly done in the Datasheet view, but doing so is valuable because it helps you understand several important concepts.

SWITCH TO THE DATASHEET VIEW

After designing the table, you are ready to add data to it. To switch to the Datasheet view:

Step 1: Click the Datasheet view icon, .

- Immediately, Access will pop up the dialog seen in Figure 36.



Figure 36

Step 2: Click .

Step 3: Enter a Table Name in Figure 37.

- Remember the naming convention; because this is a table, the prefix is tbl.

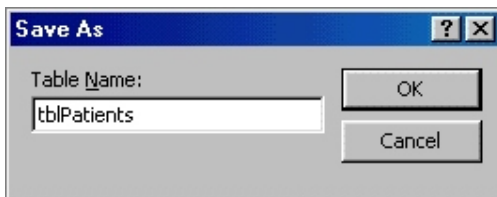


Figure 37



Step 4: Click .

If you fail to specify a Primary Key, Access will ask you if you want one added automatically. While this is a help-

ful reminder, you should click  and add one by hand.

DATASHEET

The Datasheet view, seen in Figure 38, is a familiar one, with data in a table of records (rows) and fields (columns) similar to our phone book example in Figure 2, page 1.

Simply type to enter data. As before, press  to advance and  to return to a previous column.

We need not fill all the fields, except for the field designated as the Primary Key, and those fields for which the Required property was set to “Yes” in the Design view; these fields *must* contain a value.

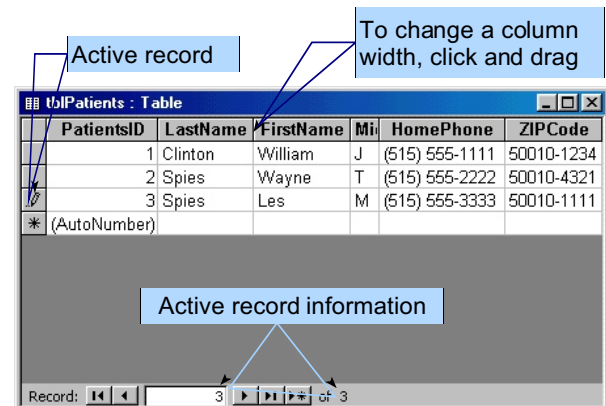


Figure 38

NAVIGATING FIELDS

Here are several methods for navigating the fields in the Datasheet view:

- **Home** moves you to the *first field* of a record.
- **End** moves you to the *last field* of a record.
- **Tab** and **←Enter** moves you *forward*, field by field.
- **Shift Tab** moves *back*, field by field.

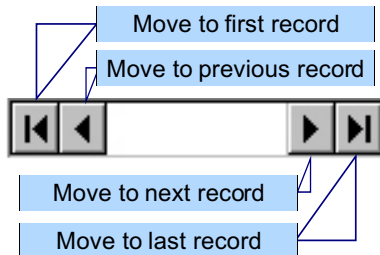
NAVIGATING RECORDS

Here are some shortcuts for navigating from record to record:

- **F5** *x*, **←Enter** takes you to record *x*.
- **Ctrl Home** takes you to the first field of the first record.
- **Ctrl End** takes you to the last field of the last record.
- **↑** takes you to the same field in the previous record.
- **↓** takes you to the same field in the next record.

DATA CONTROL

In the lower left of the Datasheet window is the data control. It can be used as a navigation tool.



Clicking the four arrows, from left to right, invokes:

- **Move First**: move to the first record in the table
- **Move Previous**: move to the previous record in the table
- **Move Next**: move to the next record in the table
- **Move Last**: move to the last record in the table

MANAGE RECORDS

Now that we can navigate the table, we need to be able to delete and copy them.

DELETING RECORDS

To delete a record in the Datasheet view:

Step 1: Right click the row header of the record to be deleted, as shown in Figure 40.

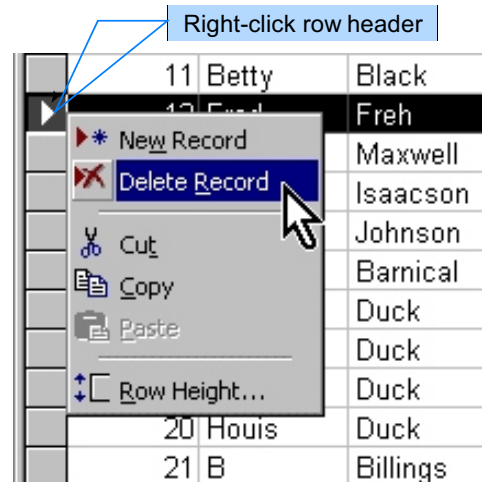


Figure 40

Step 2: Select Delete Record from the pop-up menu.

Step 3: Click **Yes** to confirm the deletion, as seen in Figure 41.



Figure 41

COPYING RECORDS

To copy and paste a record:

Step 1: Click the row header of the record to be copied.

tblPatients : Table						
	LastName	FirstName	MI	City	State	ZIPCode
	Spies		I	Ames	IA	50010-
	Spies		F	New Haven	CT	06515-
	Duck	Donald	M	Hollywood	CA	91203-
	*					

Figure 42

Step 2: Press **Ctrl C**.

Step 3: From the pull-down menu, select **Edit, Paste Append**.

Step 4: Click to confirm.

MOVING V. SELECTING

This is one of those times where we must educate your finger, more than your brain. Moving a field and selecting multiple adjacent fields are very similar.

MOVING A FIELD

To move a field in the Datasheet view:

Step 1: Click a column header to select it.

Step 2: Click it a second time and, with the mouse depressed, drag it to its new location.

- As you drag, a thick line will follow you, always between columns.
- The location of the thick line indicates where the selected field will appear if you lift your mouse finger.

SELECTING FIELDS

To select more than one adjacent field in the Datasheet view:

- Click and drag across the column headers to be selected.

FREEZE COLUMNS

As you add more and more fields, it becomes harder and harder to keep things straight. Consider the screen in Figure 43, which depicts the far-right columns of a table. You can't see the far left columns, which contain the first and last names.

City	State	ZIPCode	CreditLimit
Hamden	CT	06514	\$900.00
Dalton	MA	01226	\$700.00
New Braintree	MA	01531	\$300.00
Warwick	RI	02888	\$800.00
Dalton	MA	01226	\$300.00
Dalton	MA	01226	\$200.00

Figure 43

Now, exactly who is the person in Warwick, Rhode Island, whose credit limit is \$800?

Access's solution is its Freeze Columns feature. When you freeze columns on the far left of the table, they always appear on the screen. To freeze columns:

Step 1: In the Datasheet view, click and drag the column headers to select the FirstName and LastName fields, as shown in Figure 44.

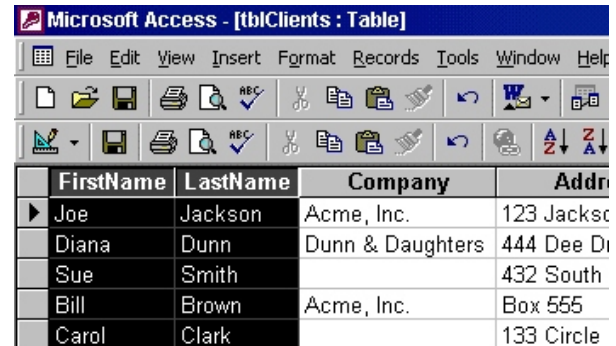


Figure 44

Step 2: From the pull-down menu, select **Format**, **Freeze Columns**.

A thick line will appear just to the right of the frozen columns. As you press **Tab**, you will move, column by column, to the right, but the frozen columns will always stay on the screen, as seen in Figure 45.

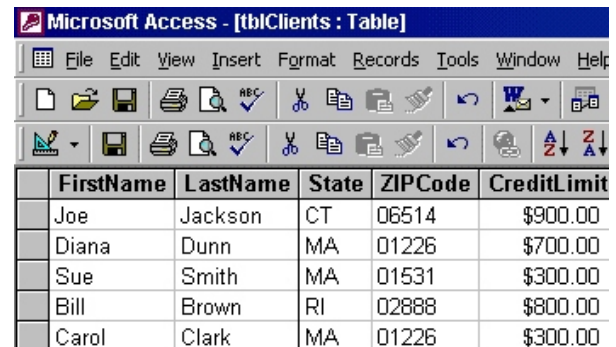


Figure 45

If the columns you freeze are not already on the extreme left, Access will move them there.

UNFREEZING COLUMNS

To unfreeze columns, from the pull-down menu, select **Format**, **Unfreeze All Columns**.

AESTHETICS

The appearance of the table in Datasheet view has absolutely no effect on the data it contains. Nonetheless, for purely aesthetic reasons, one may want to improve its appearance.

FONT

Your monitor, the screen resolution, and your eyesight are in silent conspiracy to make it difficult to read data in the Datasheet view. One solution is to increase the display font:

Step 1: From the pull-down menu, select **Format**, **Font**.

Step 2: In the Font dialog, seen in Figure 46, select a new font, font size, and color.

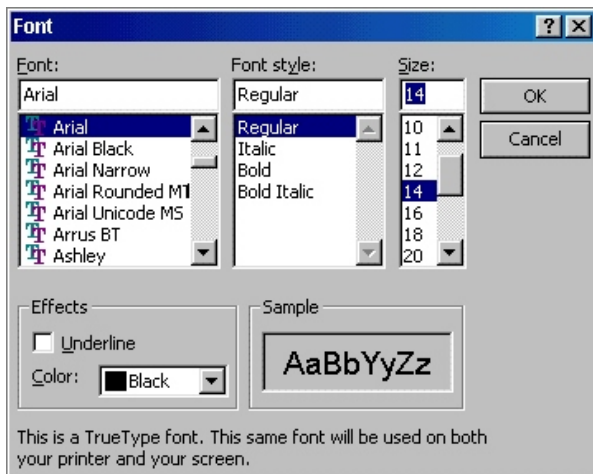


Figure 46

Step 3: Click **OK** to apply the new font and close the dialog.

The font will be applied to the entire table.

CHANGE ROW HEIGHT

Along with tinkering with the Font, you may want to adjust the Row Height. As with the Font, the Row Height property applies to the entire table.

Step 1: From the pull-down menu, select **Format**, **Row Height**.

Step 2: You can specify the Row Height in points or select the **Standard Height** check box, as shown in Figure 47.

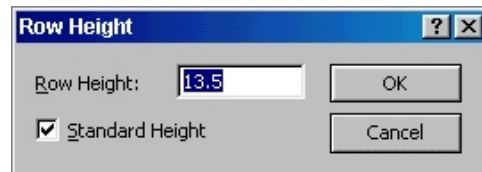


Figure 47

Step 3: Click **OK** to apply the new row height and close the dialog.

CHANGE COLUMN WIDTH

To change the width of a column, click and drag on the border between title headers, as one would change column widths in a spreadsheet. Likewise, one can change the row height, by clicking and dragging the grey borders between row headers.

You can also adjust the column Width from the pull-down menu. Select **Format** and **Column Width**. This will call up the dialog seen in Figure 48. By clicking **Best Fit**, you can make the selected column fit the widest entry in that field.

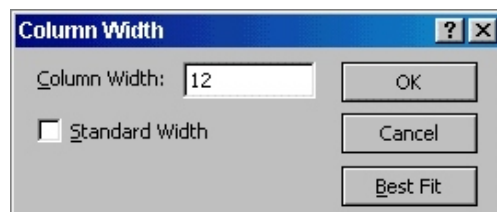


Figure 48

RENAME COLUMN

Another feature found on the **Format** menu is **Rename Column**. This is the same as returning to Design view and changing the field's name.

HIDE COLUMNS

The Datasheet View can get pretty cluttered. We can hide the columns we don't need to see, such as AutoNumber fields. To hide a column in the Datasheet View:

Step 1: Click on its column header.

- This selects the field, as in Figure 49.

ID	Last Name	First Name	MI	Addr.
1	Jones	Joe	J	111 Jaspe
2	Smith	Sue	S	222 Sudst
3	Andrews	Al	A	333 Apple
*(AutoNumber)				

Figure 49

Step 2: From the pull-down menus, select **Format**, **Hide Columns**, and the selected column will disappear.

UNHIDE COLUMNS

To restore the hidden column, again, from the pull-down menus, click **Format**, **Unhide columns**. This calls up the dialog seen in Figure 50:

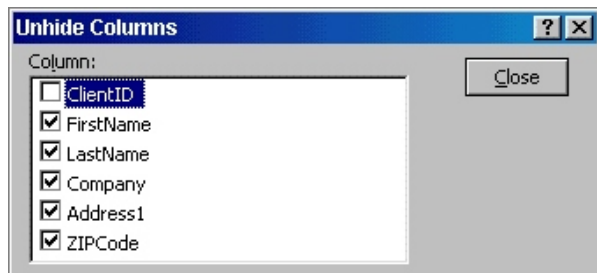


Figure 50

From this dialog, you can choose which columns to display. Those selected with a ✓ will appear. Items that have been deselected will not.

DATASHEET FORMAT

I strongly discourage playing with the Datasheet Format. Let's see why:

Step 1: From the pull-down menu, select **Format**, **Datasheet**.

Step 2: As you can see in Figure 51, you can select the **Raised** or **Sunken** special effects, or you can fiddle

with the **Background Color**, **Foreground Color**, or **borders**.

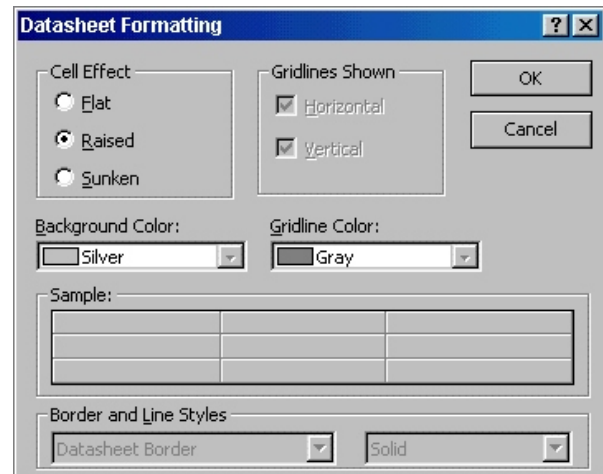



Figure 51

Step 3: Click **OK** to apply the datasheet formatting and close the dialog.


Now that you know how to do all this, don't. The Datasheet view should be all business. You want it as readable as possible, and though it may not win aesthetic awards, nothing is as readable as black print on a white background. Save your aesthetic sense for Form design.

SAVE THE DATA

Most newcomers to Access have worked with other applications. Typically in these applications, you add, delete or modify data, and then, when you get around to it, you save it. Access works the same way in Design view, as you create and modify a table's design. However, in the Datasheet view, each record is automatically saved whenever you move to a new record. The current record, which has not been saved, is designated with the "pencil" icon: .









Although each record is automatically saved when you move to another record, you can save it manually:

- press **Shift** **← Enter**;
- press **Ctrl** **S**; or,
- from the pull-down menu, select **File**, **Save**.



Regardless of the method you use, the icon will turn into , indicating that the current record has been saved.

EDITING DATA

Instead of retyping data, you may want to simply edit it. Tab to the cell and press **F2** to enter Edit Mode. Then you may maneuver and edit as you would in a word processor.

NAVIGATING IN EDIT MODE	
	Delete character to the cursor's left (or delete selected text)
	Delete the character to the cursor's right (or delete selected text)
 	Delete to the end of the line
 (or )	Move one character left (or right)
	Move to the beginning of the line
	Move to the end of the line

SORTING

In the Datasheet View, you can sort the records easily. Simply move to the field by which you would like to sort and click the Ascending (A-to-Z) or Descending (Z-to-A) order icons,  .


SORTING BY MULTIPLE CRITERIA

Sorting by a single field is often all you need. For example, you might want to sort records by ZIP Code or by State. When we sort personal names, though, sorting by one field is not enough. For instance, sorting by last name might give you something like this:

Brody	Ellen
Brooks	Sandy
Brooks	Jane
Brown	Carol
Brown	Steve
Brown	Rosemary
Brown	Charles
Brown	Gayle
Brown	Neil

Now, these names are alphabetized, all right, but only by last name. That's not a big deal if you have a half-dozen "Browns," but if you have a 1,000, that's another matter. We prefer personal names to be alphabetized in so-called "telephone book style"—that is, to sort by LastName, and then by FirstName (and then, if possible, by Middle Name), like this:

Brody	Ellen
Brooks	Jane
Brooks	Sandy
Brown	Carol
Brown	Charles
Brown	Gayle
Brown	Neil
Brown	Rosemary
Brown	Steve

If we move to the FirstName field and click the Sort Ascending icon, , the results are not what we want:

Brown	Carol
Brown	Charles
Brody	Ellen
Brown	Gayle
Brooks	Jane
Brown	Neil
Brown	Rosemary
Brooks	Sandy
Brown	Steve

Access provides a solution—but this only works in the Datasheet view (but don't worry, an even better method awaits us in Lab 4):

Step 1: Rearrange the columns in the Datasheet view, so that they are in the order to be sorted—in this case, LastName *and then* FirstName.

Step 2: Select the columns to be sorted, as shown in 3.


Step 3: Click the Sort Ascending icon, .

	Last Name	First Name	
+	Brody	Ellen	30
+	Brooks	Jane	13
+	Brooks	Sandy	15
+	Brown	Carol	Th
+	Brown	Charles	26
+	Brown	Gayle	24
+	Brown	Neil	
+	Brown	Rosemary	12
+	Brown	Steve	

Figure 55

FIND

To find a specific record:

Step 1: Click the Find icon, .

Step 2: Enter the term for which you search in the Find What box.

Step 3: In the Match box, seen in Figure 57, you may select:

- Any Part of Field;
- Whole Field; or,
- Start of Field.

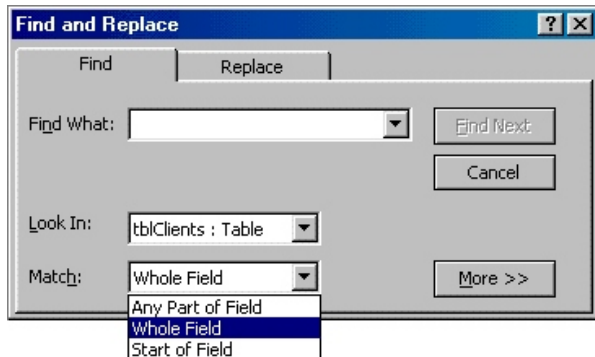


Figure 57

Step 4: Click .

WILDCARDS

You may use wildcards in the Find What box:

- ? stands for one character;
- # stands for any one number; and,
- * stands for any number of characters.

FIND BEHAVIOR

By default, Access searches forward from the point of the cursor for an exact match. To change this behavior:

Step 1: From the pull-down menu, select Tools, Options.

Step 2: On the Edit/Find tab and select an option from you want from Figure 58:

- **Fast search:** search forward from the point of the cursor in the current field for an exact match;
- **General search:** search all fields, matching any part of the field.
- **Start of field search:** search the current field for matches between your search string and the beginning characters of the field.

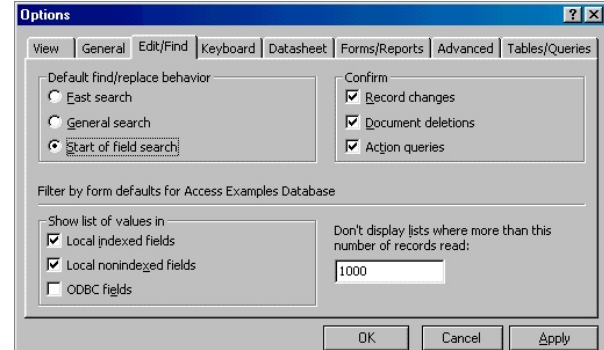




Figure 58

Step 3: Click  to apply the change and close the dialog.

You may have to restart Access before the change takes effect.

FILTER


The Filter is a basic version of a query that can be applied from within the Datasheet view. The filter tools,

, appear on the Table Datasheet toolbar.


FILTER BY SELECTION

Let's say you have a table listing clients and their addresses. You would like a list of all of your clients from New York. To do this:

Step 1: Click in the State field wherever you see NY.


Step 2: Click the Filter by Selection icon, .

Instantly, you have a table showing only those clients from New York.

To clear the filter and return the regular table, click the Remove Filter icon, .

FILTER BY FORM

The Filter by Form feature is even more powerful:


Step 1: Click the Filter by Form icon, .

- Access will show a blank table.
- Whatever field becomes active will show a drop-down box listing Is Null or Is Not Null.

Step 2: Type the search criterion in the appropriate field.

Step 3: Click  to apply the filter.

Access will display only those records where the field contains your criterion.

Again, to clear the Filter, click the Remove Filter icon, .

When you click the Filter By Form button on the Form View toolbar, the Or tabs at the bottom of the form, seen in Figure 65.

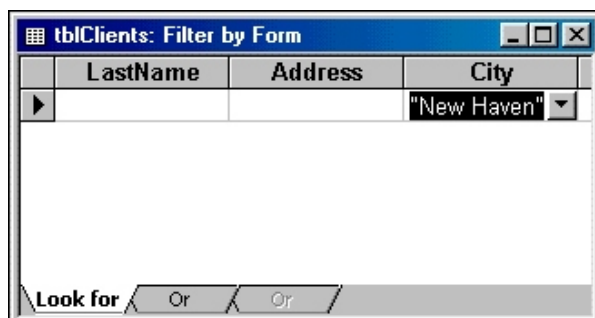



Figure 65

Each criterion you enter in the “Look for” tab will be combined by a logical AND. To use a logical OR, select an “Or” tab.

RETURN TO TABLE DESIGN

Anytime you are working in the Datasheet view, you can return to the Table Design view by clicking the Design View icon, . You can add fields, delete fields, or change the properties of existing fields.

CAUTION

You should exercise great care when changing a table's structure, once data have been added. For instance, if you delete a field, you also delete its data. Similarly, you can change field size, but if you make a field smaller, you risk losing information. If you change a Field Name, you must manually update any object that subsequently uses that field.


NOTES

LAB 2: ADDING DATA TO A TABLE

In the previous lab, we designed a table, but we did not add data to it—a bookshelf without books. In this lab, we add records to our database.

UNDO

To undo changes you are making in the current field, press **Esc**. To undo all changes you have made to the current record, press **Esc** twice.

As in most Windows® applications, pressing **Ctrl Z** will undo the last operation. This is identical to clicking the Undo icon, . However, in Access, this capability is often limited.

SHORT-CUTS KEYS

Entering data can be a tedious, painstaking job. Access has some shortcuts for inserting some kinds of data in a hurry:

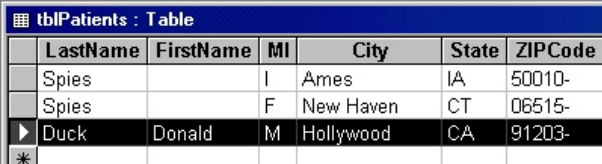
- **Ctrl '** inserts previous record's value for the current field.
- **Ctrl ;** inserts the current date as text.
- **Ctrl :** inserts the current time as text.
- **Ctrl +** adds a new record.
- **Ctrl Alt Space bar** returns the default, if one exists.
- **Space bar** toggles a check box.
- **F4** or **Alt ↓** expands a drop-down list.

Here's another shortcut. If you hold down **Ctrl** as you double-click an object (such as a table, query, or form) in the Database window, Access will open that object in Design view.

COPY RECORDS

It's common to have two records that are almost identical. For example, you may have a parent bringing several children to a health clinic. You can press **Ctrl '** to copy data for the current field from the preceding record, but, if there are a lot of fields, even this takes too long. Instead, you can use the Paste Append feature:

Step 1: Click the Row header to select the record, as shown in Figure 68.



	LastName	FirstName	MI	City	State	ZIPCode
	Spies		I	Ames	IA	50010-
	Spies		F	New Haven	CT	06515-
▶	Duck	Donald	M	Hollywood	CA	91203-
*						

Figure 68

Step 2: Press **Ctrl C** to copy the record.

Step 3: From the pull-down menu, select **Edit, Paste Append**.

Step 4: Click **Yes** to confirm.




This will append the copied record to your database table. You can modify the fields of the new record as necessary.

SPELL CHECK

You might think that Spell Check would be pretty worthless in a database. After all, so many of the entries are proper nouns e-mail addresses, and product codes. You would be wrong. To run Spell Check:

Step 1: Open a table in the Datasheet view.

Step 2: To run Spell Check:

-  click the Spell Check icon, ; or,
-  press **F7**.

Step 3: The Spell Check interface is similar to those in other Office applications, with one major exception: you can click **Ignore 'x' Field**, where *x* is the name of the first field where a misspelling is encountered.

- For example, if Spell Check stops on an e-Mail field, as shown in Figure 70, you can click **Ignore 'e-Mail' Field**.

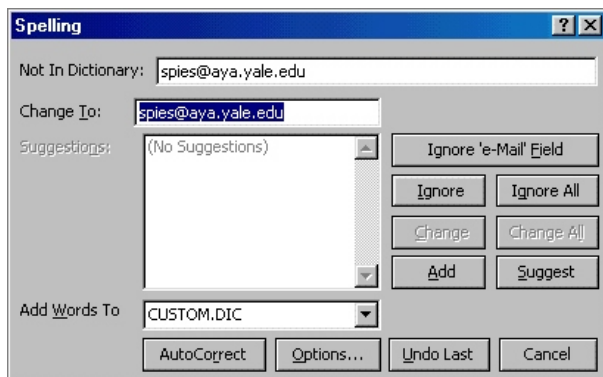


Figure 70

Step 4: Otherwise, you may:

- click **Add** to add the item to your permanent spelling dictionary;
- click **Ignore** to ignore this instance of the item; or,
- click **Ignore All** to ignore all instances of the item during this session.

USING SPELL CHECK

Let's say a field contains the single sentence:

Claryn and Annn went to to see José.

When you run Spell Check, it will stop on the word “Claryn,” as seen in Figure 71, because it does not have that name in its spelling dictionary.

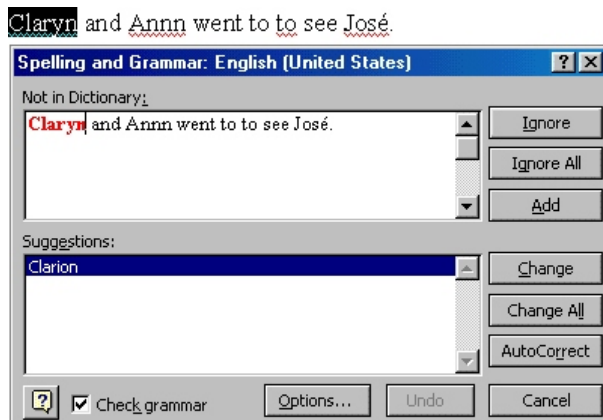


Figure 71

Now, it turns out that “Claryn” is properly spelled. What should you do?

- If you click **Ignore**, Spell Check will ignore “Claryn” this time, but, if it encounters it again, it will flag it as a misspelling.
- If you click **Ignore All**, Spell Check will ignore “Claryn” every time it encounters it in this document.
- If you click **Add**, Spell Check will permanently add “Claryn” to its Spelling dictionary. If you do that, it will never again flag “Claryn” as misspelled.

Because this database has several references to Claryn, we will click **Ignore All**. Word moves on to the next problem, “Annn,” as seen in Figure 72.

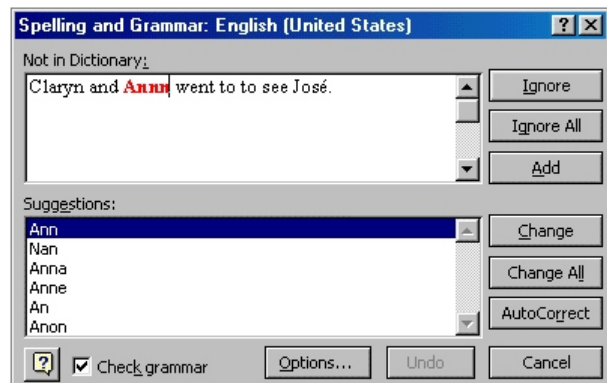


Figure 72

In this case, “Annn” is misspelled. We meant to type “Ann.” As you can see, “Ann” is offered as one of the suggestions. What should you do?

- If you click **Change**, Spell Check will change “Annn” to “Ann” in your document.
- If you click **Change All**, Word will change every “Annn” that it encounters in this document to “Ann.”

Because Ann is never spelled with three n's, click **Change All** to correct such a misspelling anywhere in the document. Again, we move to the next problem, the double “to,” as seen in Figure 73.

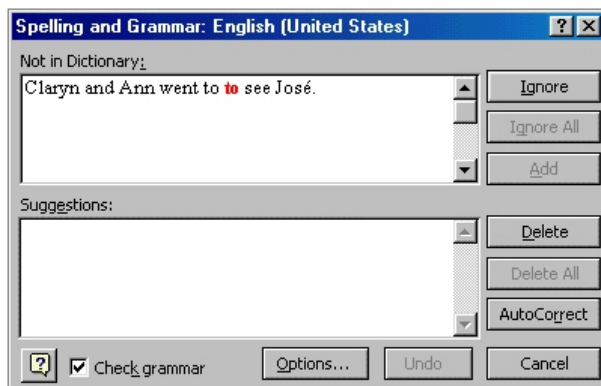


Figure 73

What should you do?

- If you meant to type “to to,” click **Ignore**.
- If you made a mistake, click **Delete** to delete the second “to.”

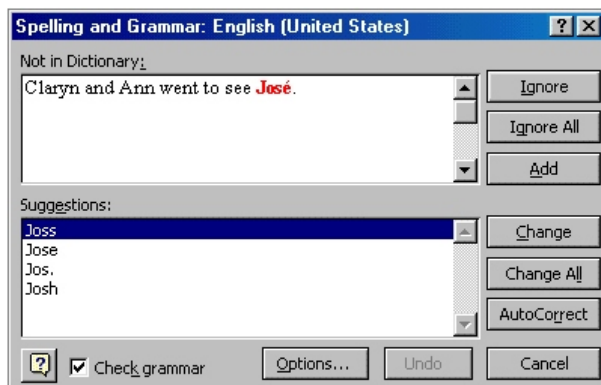


Figure 74

Because this is a mistake, click **Delete**, and Word will jump to the next problem, “José,” seen in Figure 74.

Although Jose is in the spelling dictionary, José is not. What should you do?

- If you click **Add**, Word will add José to its permanent dictionary.
- As before, we could Ignore it or Change it.

In this case, you should click **Add** to add “José” permanently to the spelling dictionary. Now José will never be flagged as misspelled again.

SPELL CHECK & AUTOCORRECT

When you encounter a misspelled word while running Spell Check, one option is to click **AutoCorrect**. That will add the misspelled word and its selected alternative to the AutoCorrect list. Then, whenever you type that word, it will be automatically replaced by its alternative. Strangely, Access’s AutoCorrect dictionary is not the same as Word’s AutoCorrect dictionary.

In Figure 75, if you were to click **AutoCorrect**, the next time you typed “Claryn” it would be automatically replaced by “Claire.”

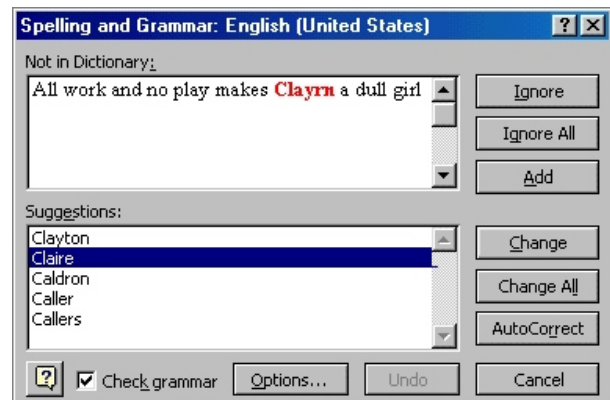



Figure 75

This isn’t a good idea. Filling the AutoCorrect dictionary with common words slows down your computer. Instead, save AutoCorrect for foreign words, physical errors, and expansions. Use Spell Check for your adventures in spelling.

SPELLING OPTIONS

By default, Access ignore words that are completely in uppercase or that contain numbers, such as street addresses. To change this:

Step 1: Either:

- click the Spell Check icon, ; or,
- press **F7**.

Step 2: Click **Options**.

Step 3: Deselect the Words in UPPERCASE check box, shown in Figure 77.

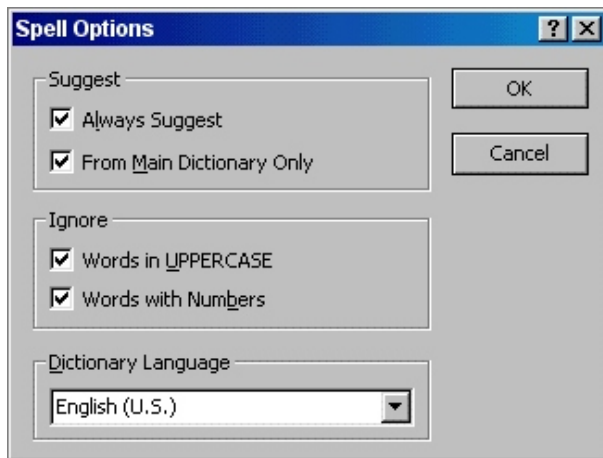


Figure 77

Step 4: Deselect the Words with Numbers check box.

Step 5: Click **OK**.

APPENDING DATA

Instead of editing existing records, you may want to append data to a table:

- From the pull-down menu, in the Datasheet view, select Records, Data Entry.

Access will hide the existing records, so that all you can see are the new records that you append to the table.

CAPS LOCK BEHAVIOR

In most applications, if you press **Caps Lock** once and then type, you will get upper-case letters, unless you press **Shift** as you type a letter—in which case, the letter will be lower-case. It's easy to tap **Caps Lock** accidentally and not realize your mistake. Therefore, if Caps Lock is on, and you press **Shift** for one letter and then release it for more letters your get:

wAYNE

instead of:

Wayne

as you intended. To prevent this, Access modified the behavior of **Caps Lock**: if Caps Lock is on, and you press **Shift** for one letter and then release it for the remaining letters, it reverses them. Thus, if you type:

wAYNE

Access will 1) turn off Caps Lock, and 2) convert wAYNE to Wayne.

Usually, this is so transparent that, when it works, you don't even realize it. Still, you should be aware of it in case you really wanted to type wAYNE.

PRINT RECORDS

When we print information from a database, we should create a Report, a topic that we cover in Chapter 6. Still, there are times when we want to print a table:

Step 1: Hide the fields that you do not need.

Step 2: Resize the columns to eliminate extraneous space.

Step 3: Either:

- press **Ctrl P**; or,
- from the pull-down menu, select **File, Print**.

Step 4: To change page margins, click **Setup**.

Step 5: Change page margins, seen in Figure 78, and click **OK**.

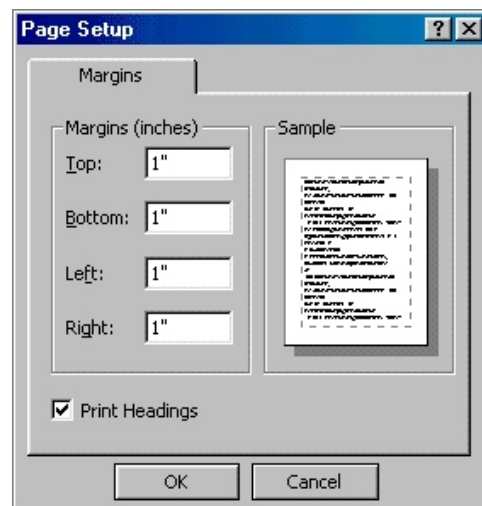


Figure 78

Step 6: Click **OK** to start the print job and close the dialog.



PRINT SELECTED RECORDS

Instead of printing an entire table, you may want to print only selected records.

Step 1: In the Datasheet view, click the row header of the record you want to print.

- To select more than one record, hold down **Shift** as you click and drag row headings.

Step 2: Either:

-  press **Ctrl P**; or,
-  from the pull-down menu, select **File, Print**.

Step 3: Select the Selected Record(s) option, shown in 3.

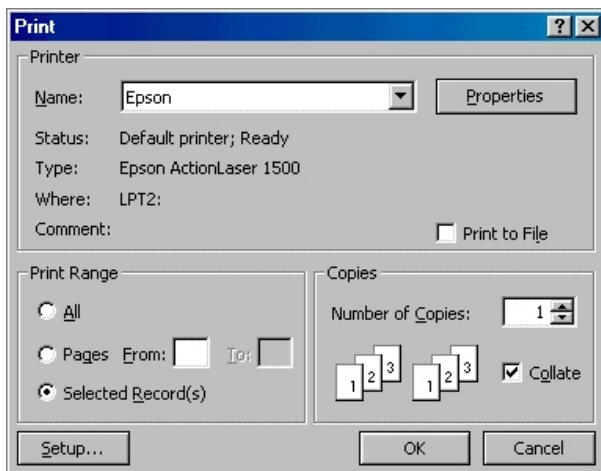


Figure 79

Step 4: Click **OK** to print the records and close the dialog.