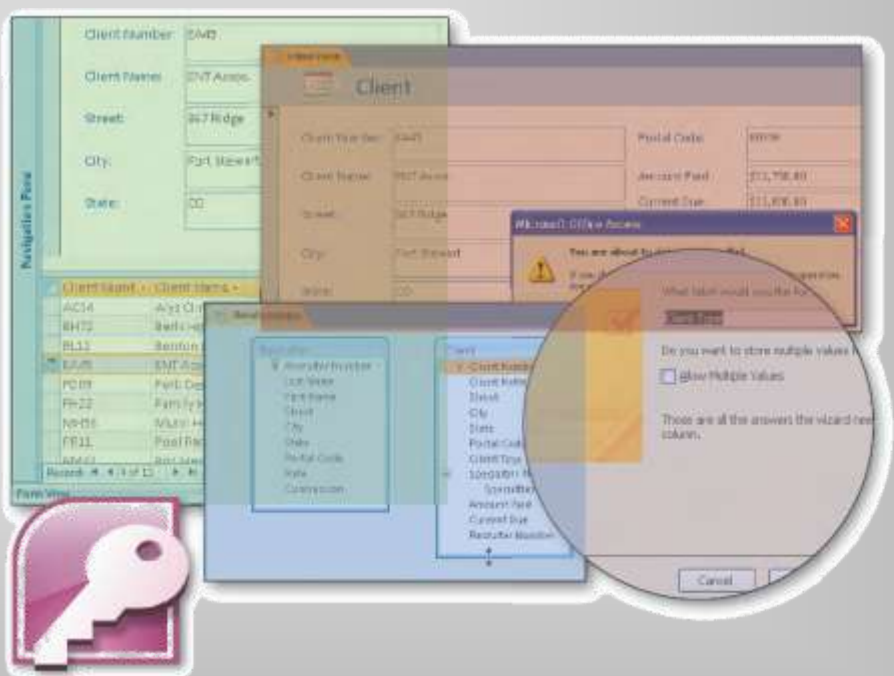
Microsoft Office 2007

Access Chapter 3

Maintaining a Database



Objectives

- Add, change, and delete records
- Search for records
- Filter records
- Update a table design
- Format a datasheet
- Use action queries to update records

Objectives

- Specify validation rules, default values, and formats
- Create and use single-valued and multivalued Lookup fields
- Specify referential integrity
- Use a subdatasheet
- Sort records

Plan Ahead

- Determine when it is necessary to add, change, or delete records in a database
- Determine whether you should filter records
- Determine whether additional fields are necessary or whether existing fields should be deleted
- Determine whether validation rules, default values, and formats are necessary
- Determine whether changes to the format of a datasheet are desirable
- Identify related tables in order to implement relationships between the tables

Starting Access

- Click the Start button on the Windows Vista taskbar to display the Start menu
- Click All Programs at the bottom of the left Pane on the Start menu to display the All Programs list and then click Microsoft Office in the All Programs list to display the Microsoft Office list
- Click Microsoft Office Access 2007 on the Microsoft Office list to start Access and display the Getting Started with Microsoft Office Access window
- If the Access window is not maximized, click the Maximize button on its title bar to maximize the window

Opening a Database

- With your USB flash drive connected to one of the computer's USB ports, click the More button to display the Open dialog box
- If the Folders list is displayed below the Folders button, click the Folders button to remove the Folders list
- If necessary, click Computer in the Favorite Links section and then double-click UDISK 2.0 (E:) to select the USB flash drive, as the new open location. (Your drive letter might be different.)
- Click JSP Recruiters to select the file name

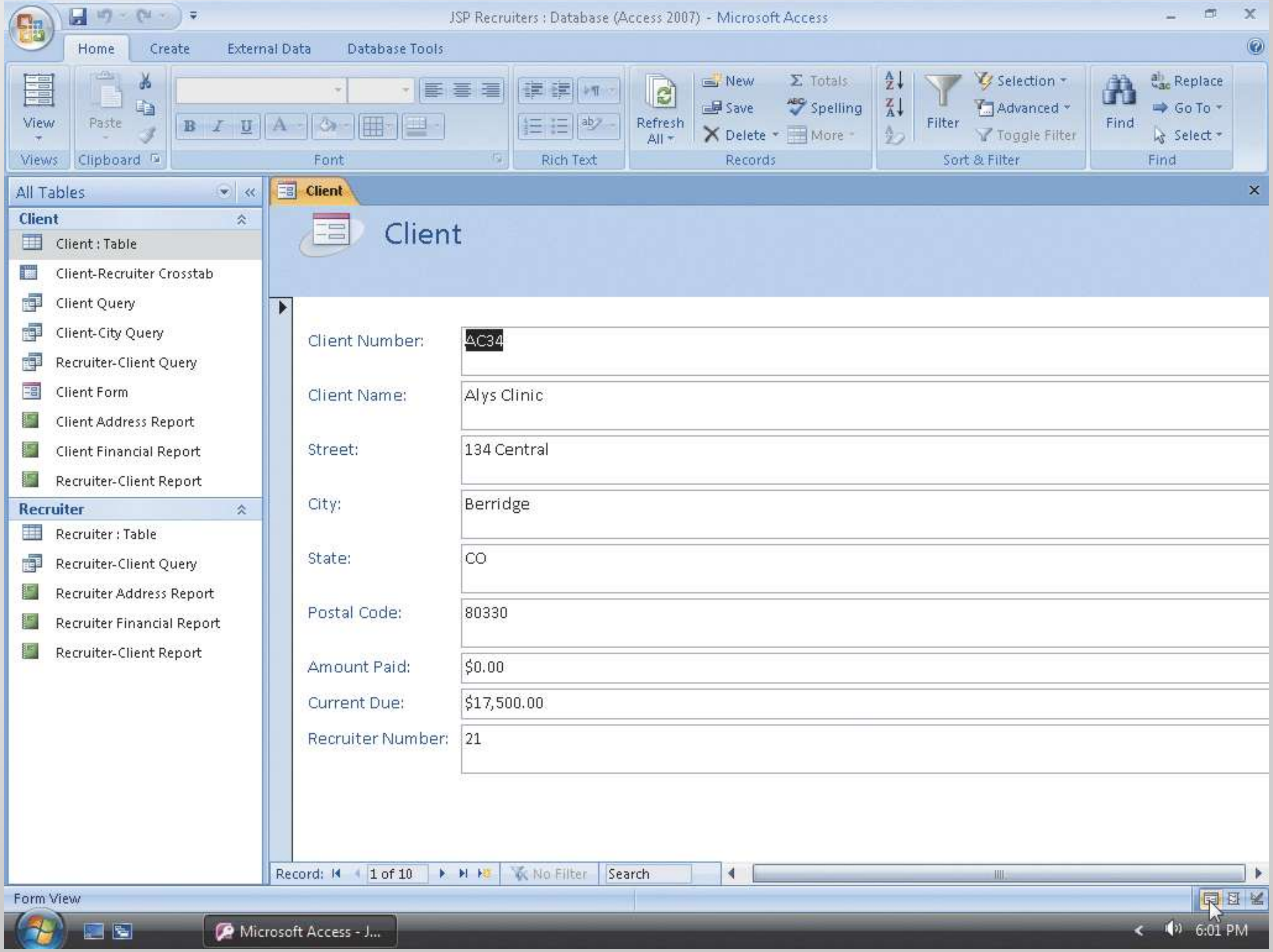
Opening a Database

- Click the Open button to open the database
- If a Security Warning appears, click the Options button to display the Microsoft Office Security Options dialog box
- Click the Enable this content option button
- Click the OK button to enable the content

Creating a Simple Form

- Show the Navigation pane if it is currently hidden
- If necessary, click the Client table in the Navigation pane to select it
- Click Create on the Ribbon to display the Create tab
- Click the Form button on the Create tab to create a simple form
- Click the Form View button to display the form in Form view

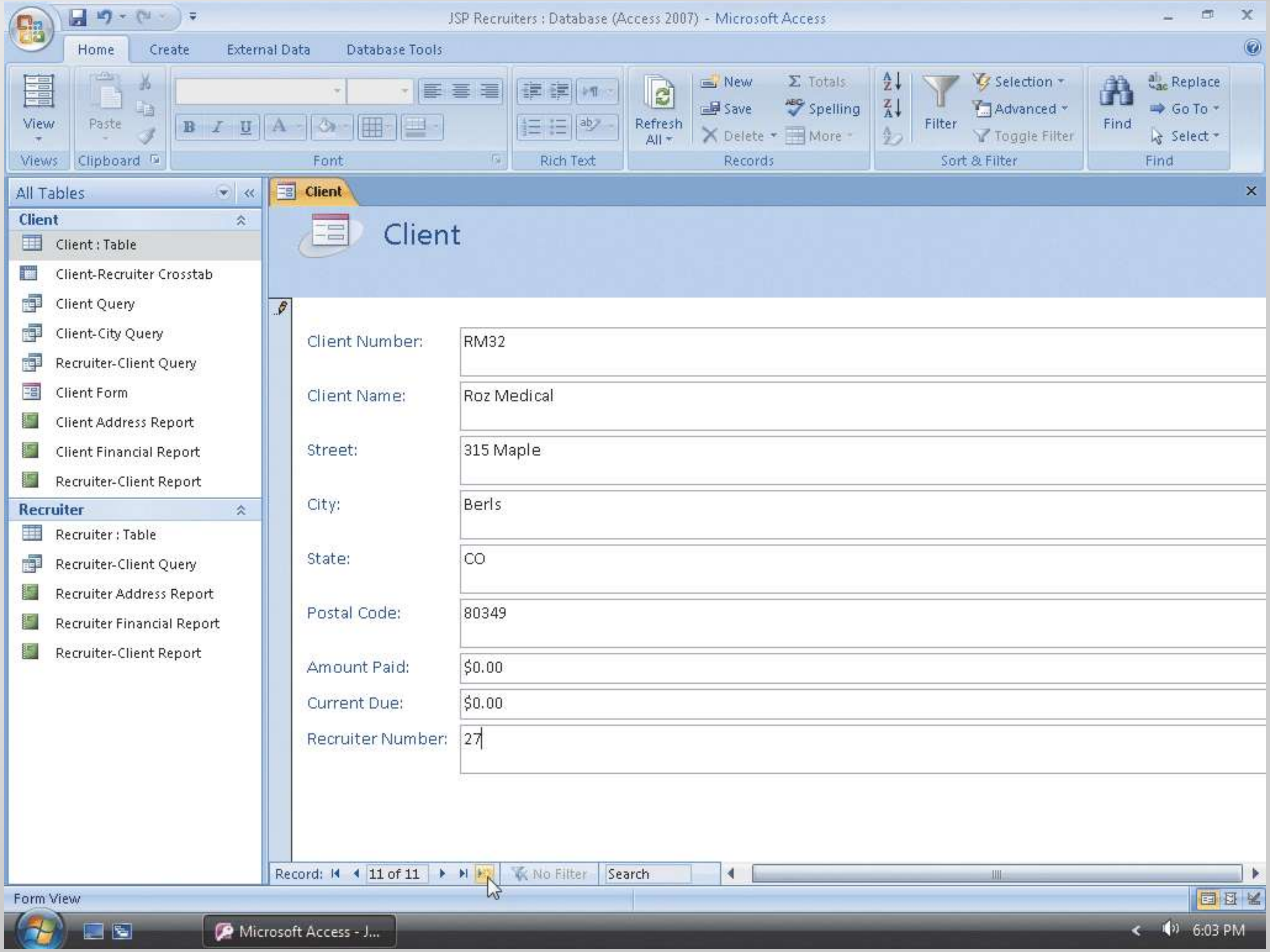
Creating a Simple Form



Using a Form to Add Records

- Click the New (blank) record button on the Navigation bar to enter a new record, and then type the data for the new record as shown on the following slide. Press the TAB key after typing the data in each field, except after typing the data for the final field (Recruiter Number)
- Press the TAB key to complete the entry of the record
- Click the Close ‘Client’ button to close the Client form
- Click the No button when asked if you want to save your changes

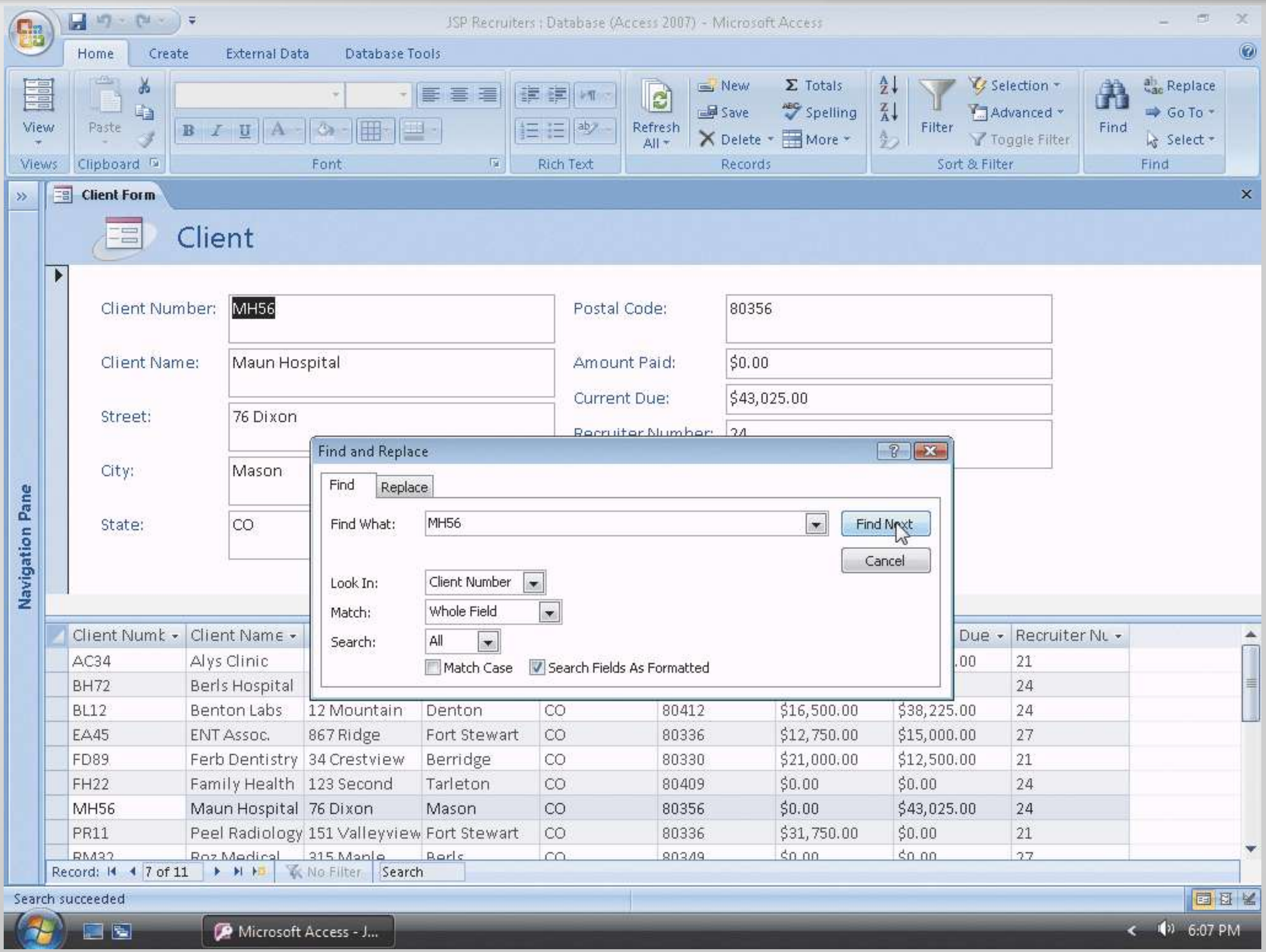
Using a Form to Add Records



Searching for a Record

- Right-click Client Form in the Navigation pane and click Open on the shortcut menu to open the form in Form view
- Hide the Navigation pane
- Click the Find button on the Home tab to display the Find and Replace dialog box
- Type `MH56` in the Find What text box
- Click the Find Next button in the Find and Replace dialog box to find client MH56
- Click the Cancel button in the Find and Replace dialog box to remove the dialog box from the screen

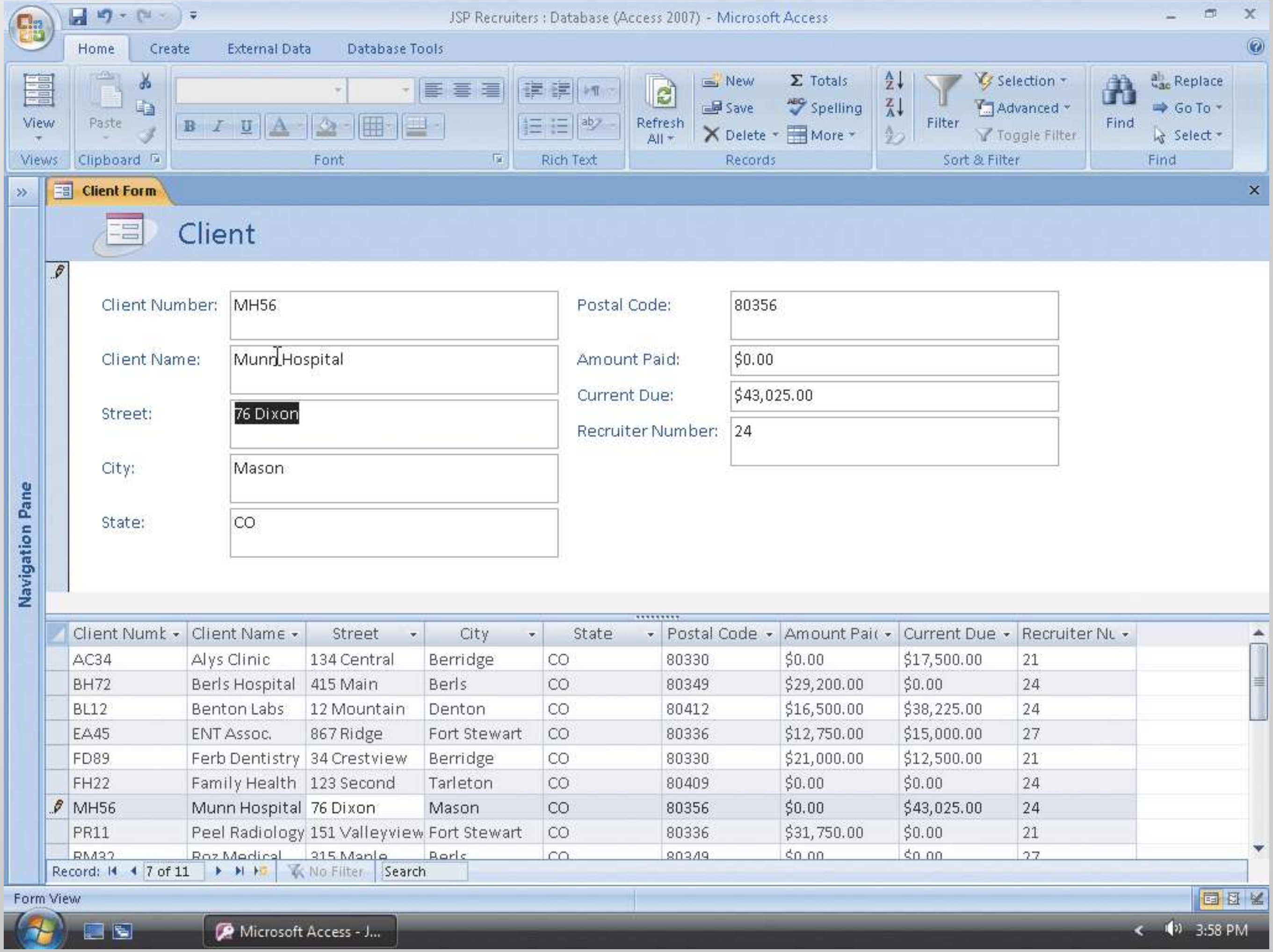
Searching for a Record



Updating the Contents of a Record

- Click in the Client Name field in the datasheet for client MH56 after the letter M to select the field
- Press the DELETE key twice to delete the letters au
- Type the letters `un` after the letter M
- Press the TAB key to complete the change and move to the next field

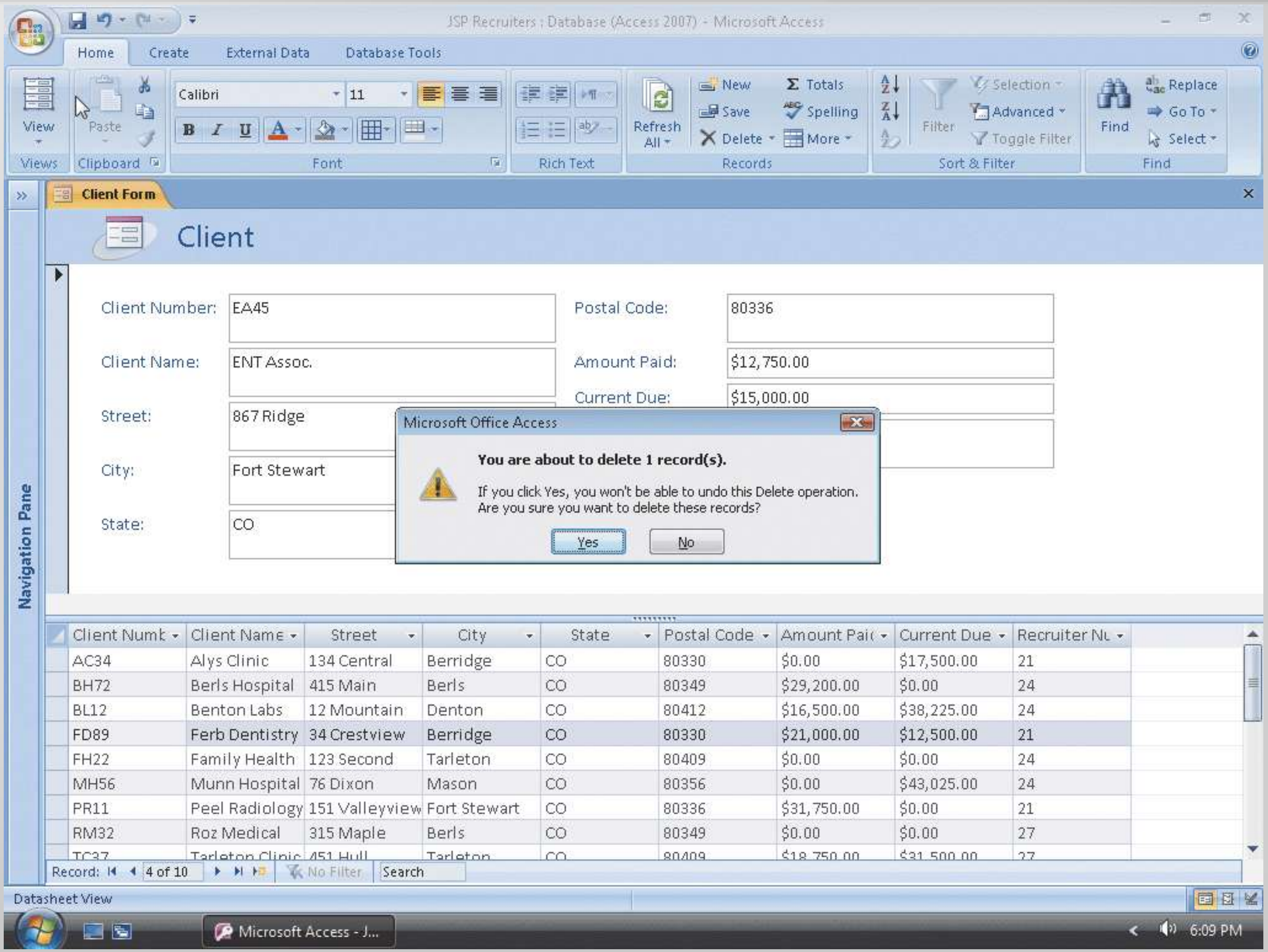
Updating the Contents of a Record



Deleting a Record

- With the Client Form open, click the record selector in the datasheet (the small box that appears to the left of the first field) of the record on which the client number is EA45
- Press the DELETE key to delete the record
- Click the Yes button to complete the deletion
- Close the Client Form by clicking the Close ‘Client Form’ button

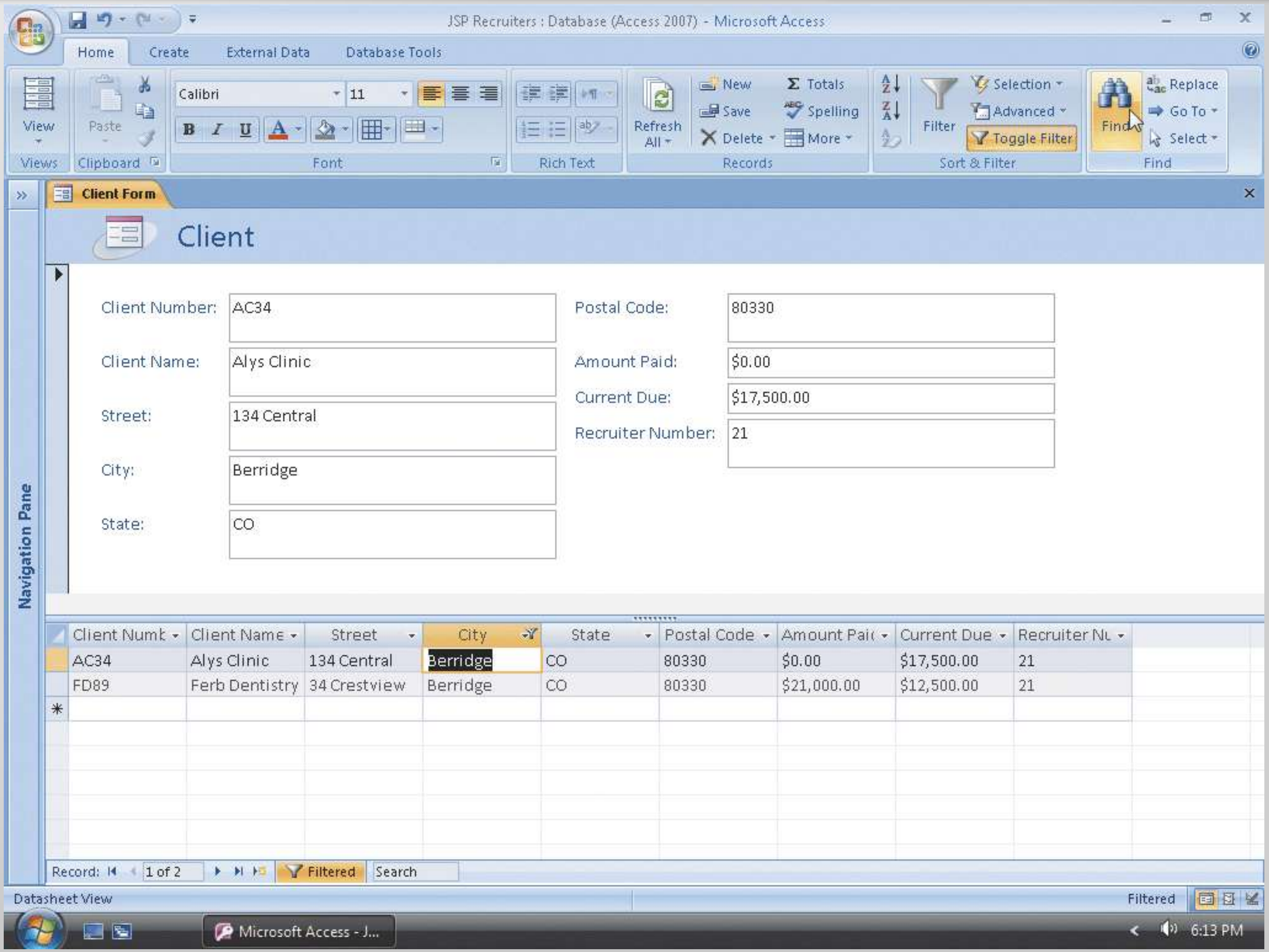
Deleting a Record



Using Filter By Selection

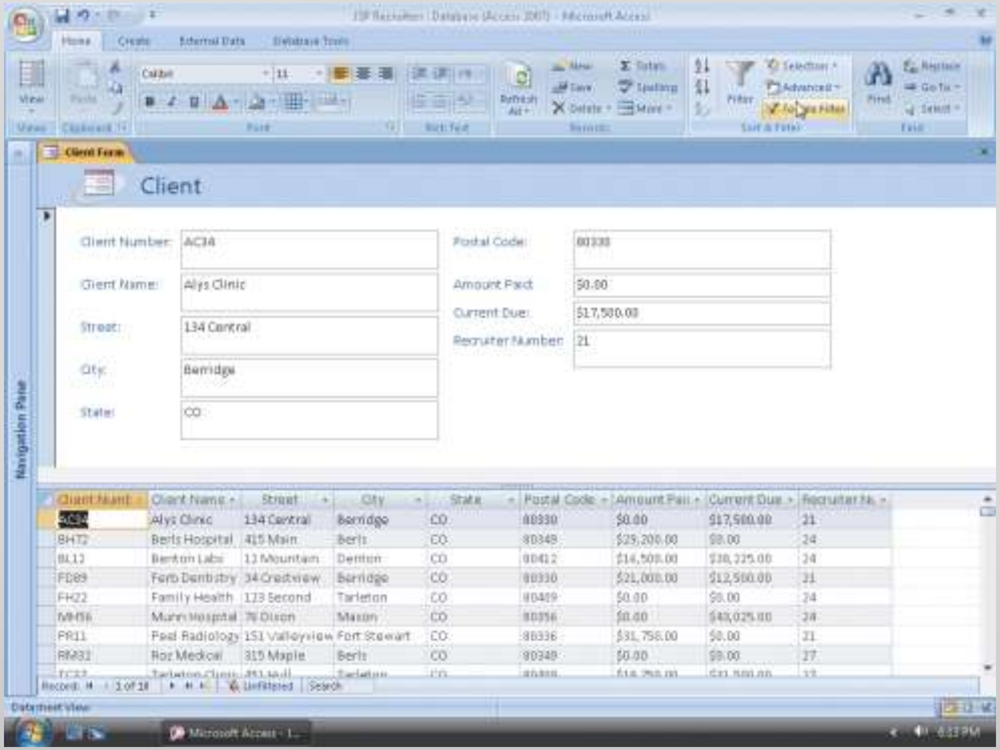
- Open the Client form and hide the Navigation pane
- Click the City field on the first record in the datasheet portion of the form to select Berridge as the city
- Click the Selection button on the Home tab to display the Selection menu
- Click Equals “Berridge” to select only those clients whose city is Berridge

Using Filter By Selection



Toggling a Filter

- Click the Toggle Filter button on the Home tab to toggle the filter and redisplay all records



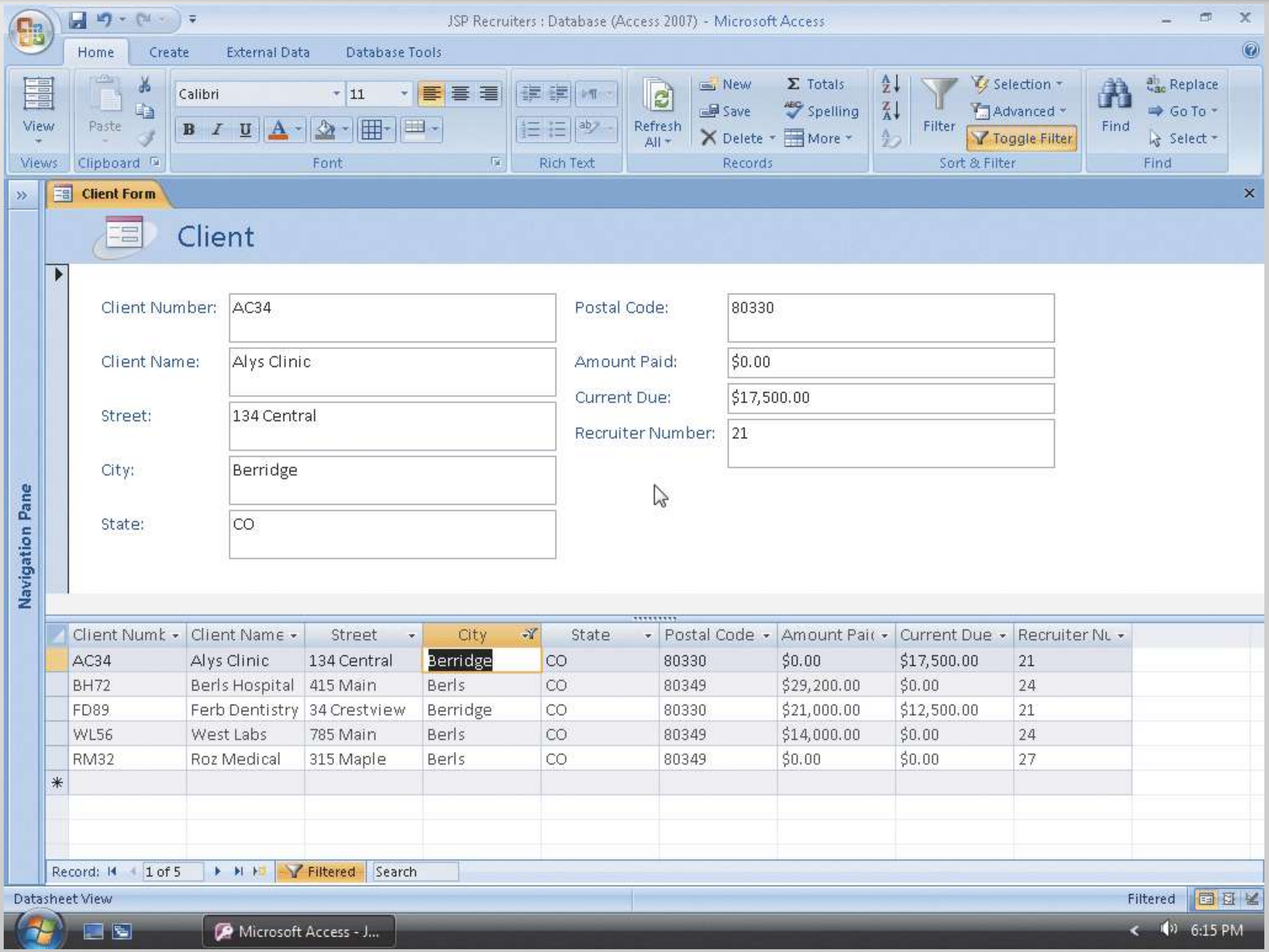
Using a Common Filter

- Be sure the Home tab is selected
- Click the City arrow to display the common filter menu
- Point to the Text Filters command to display the custom text filters
- Click Begins With to display the Custom Filter dialog box

Using a Common Filter

- Type `Ber` as the City begins with value
- Click the OK button to filter the records
- Click the Toggle Filter button on the Home tab to toggle the filter and redisplay all records

Using a Common Filter



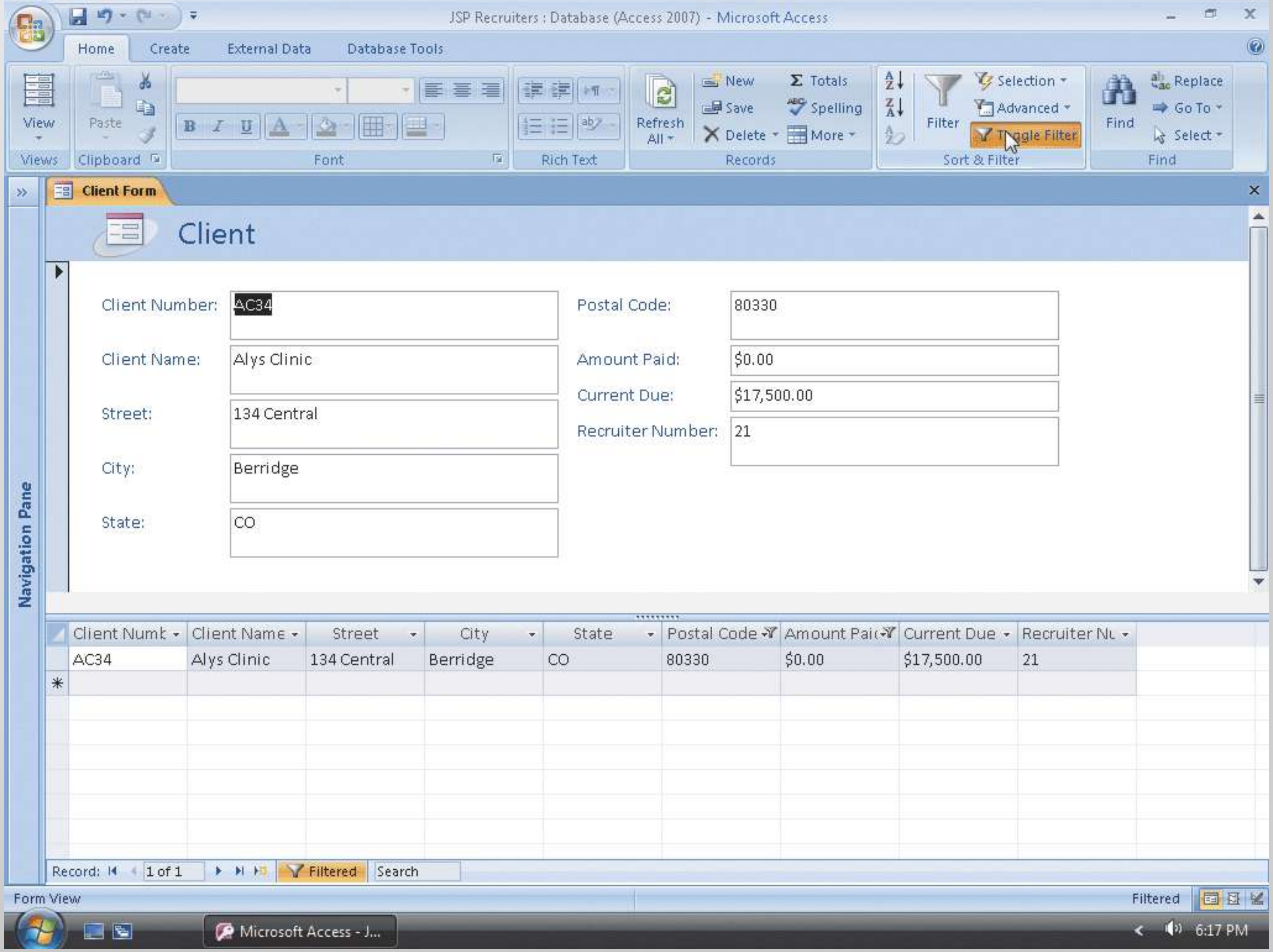
Using Filter By Form

- Click the Advanced button on the Home tab to display the Advanced menu
- Click Clear All Filters on the Advanced menu to clear the existing filter
- Click the Advanced button on the Home tab to display the Advanced menu a second time
- Click Filter By Form on the Advanced menu

Using Filter By Form

- Click the Postal Code field, click the arrow that appears, and then click 80330
- Click the Amount Paid field, click the arrow that appears, and then click 0
- Click the Toggle Filter button on the Home tab to apply the filter

Using Filter By Form



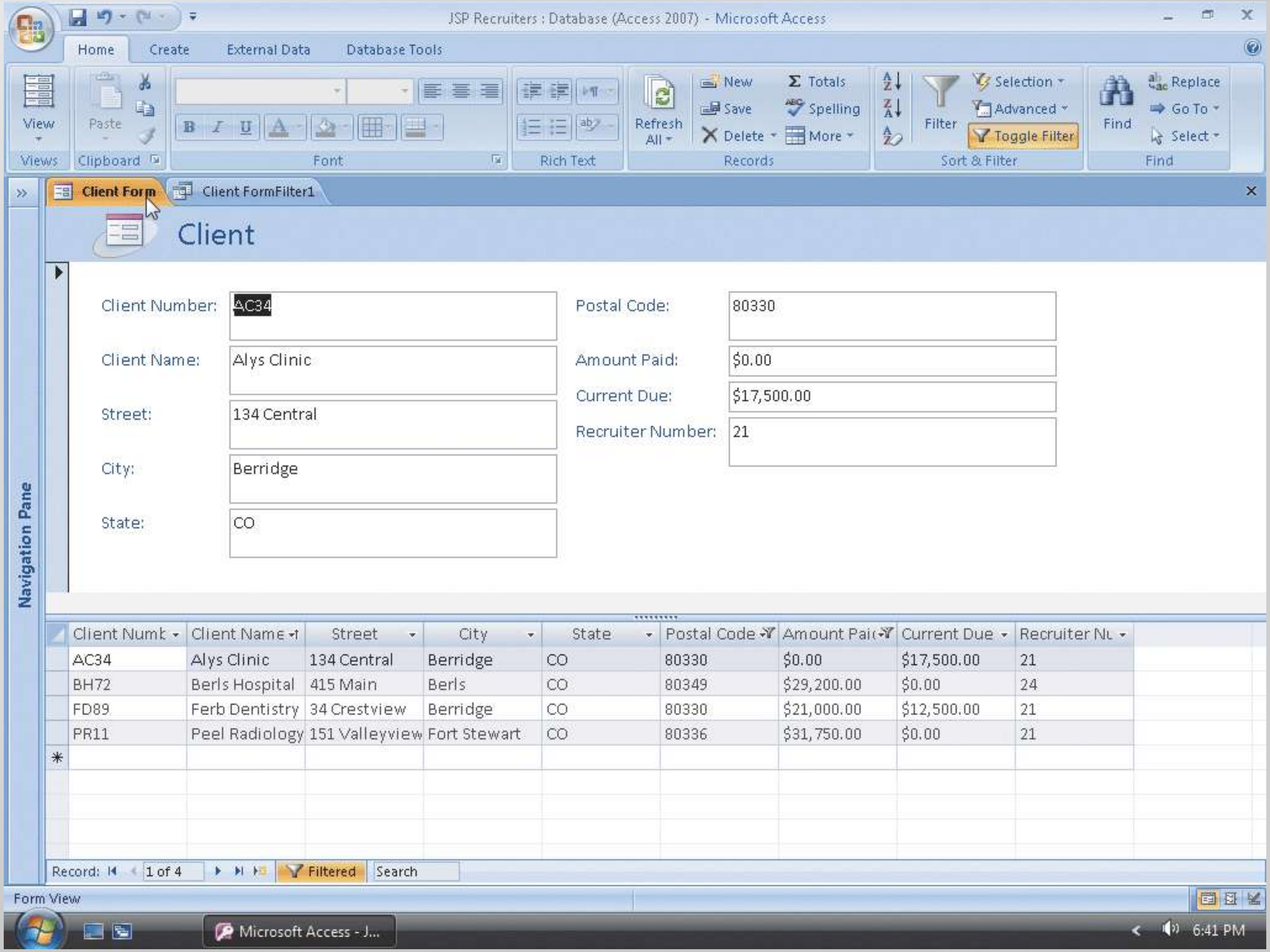
Using Advanced Filter/Sort

- Click the Advanced button on the Home tab to display the Advanced menu, and then click Clear All Filters on the Advanced menu to clear the existing filter
- Click the Advanced button on the Home tab to display the Advanced menu a second time
- Click Advanced Filter/Sort on the Advanced menu
- Expand the size of the field list so all the fields in the Client Table appear
- Include the Client Number field and select Ascending as the sort order

Using Advanced Filter/Sort

- Include the Postal Code field and enter `80330` as the criterion
- Include the Amount Paid field and enter `0` as the criterion in the Criteria row and `>20000` as the criterion in the Or row
- Click the Toggle Filter button on the Home tab to toggle the filter and view the results. Click the Client Form tab to view the Client table
- Click Clear All Filters on the Advanced menu
- Close the Client Form

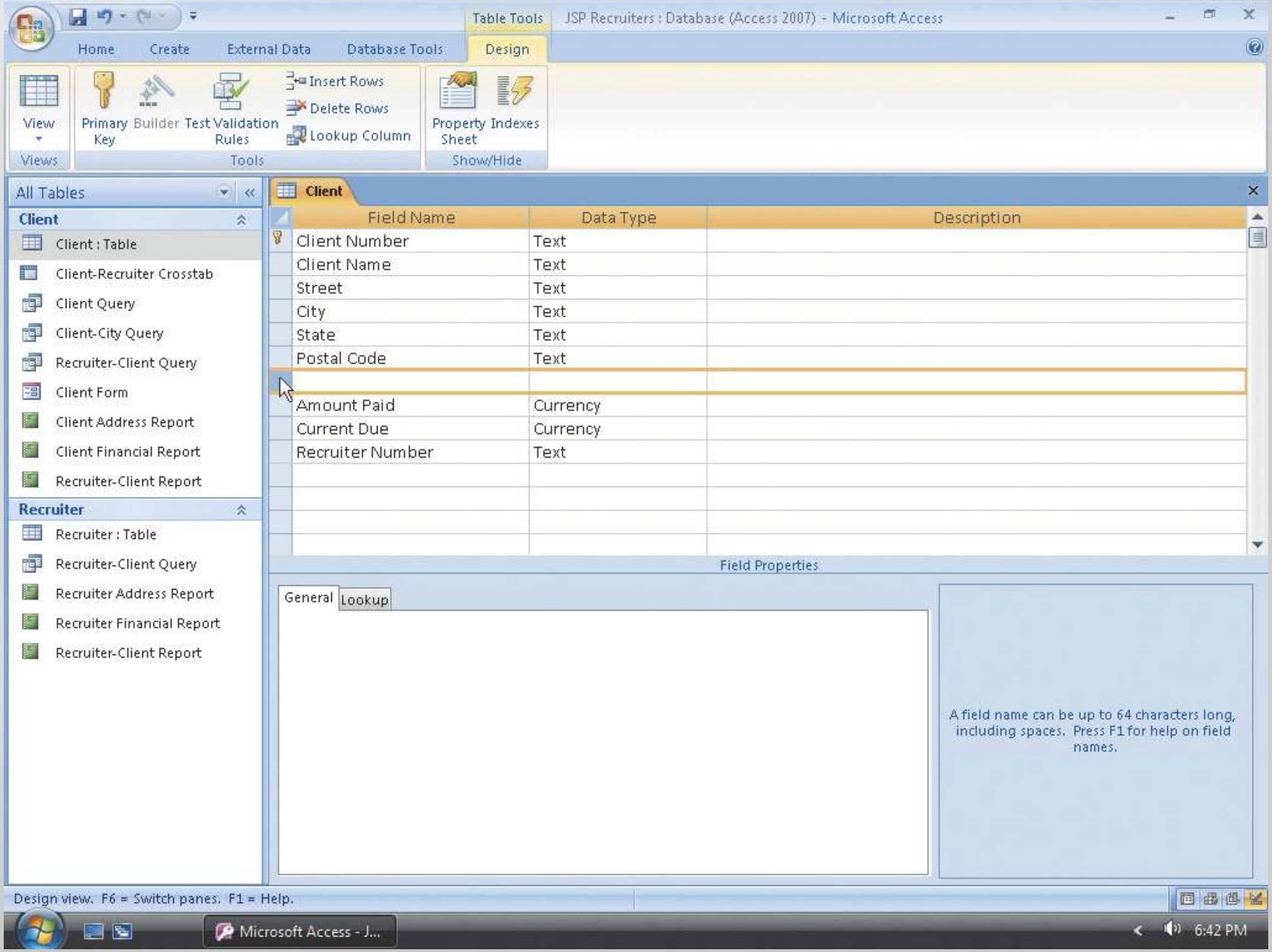
Using Advanced Filter/Sort



Adding a New Field

- Show the Navigation pane, and then right-click the Client table to display a shortcut menu
- Click Design View on the shortcut menu to open the Client table in Design view
- Click the row selector for the Amount Paid field, and then press the INSERT key to insert a blank row above the Amount Paid row
- Click the Field Name column for the new field. If necessary, erase any text that appears
- Type `Client Type` as the field name and then press the TAB key

Adding a New Field



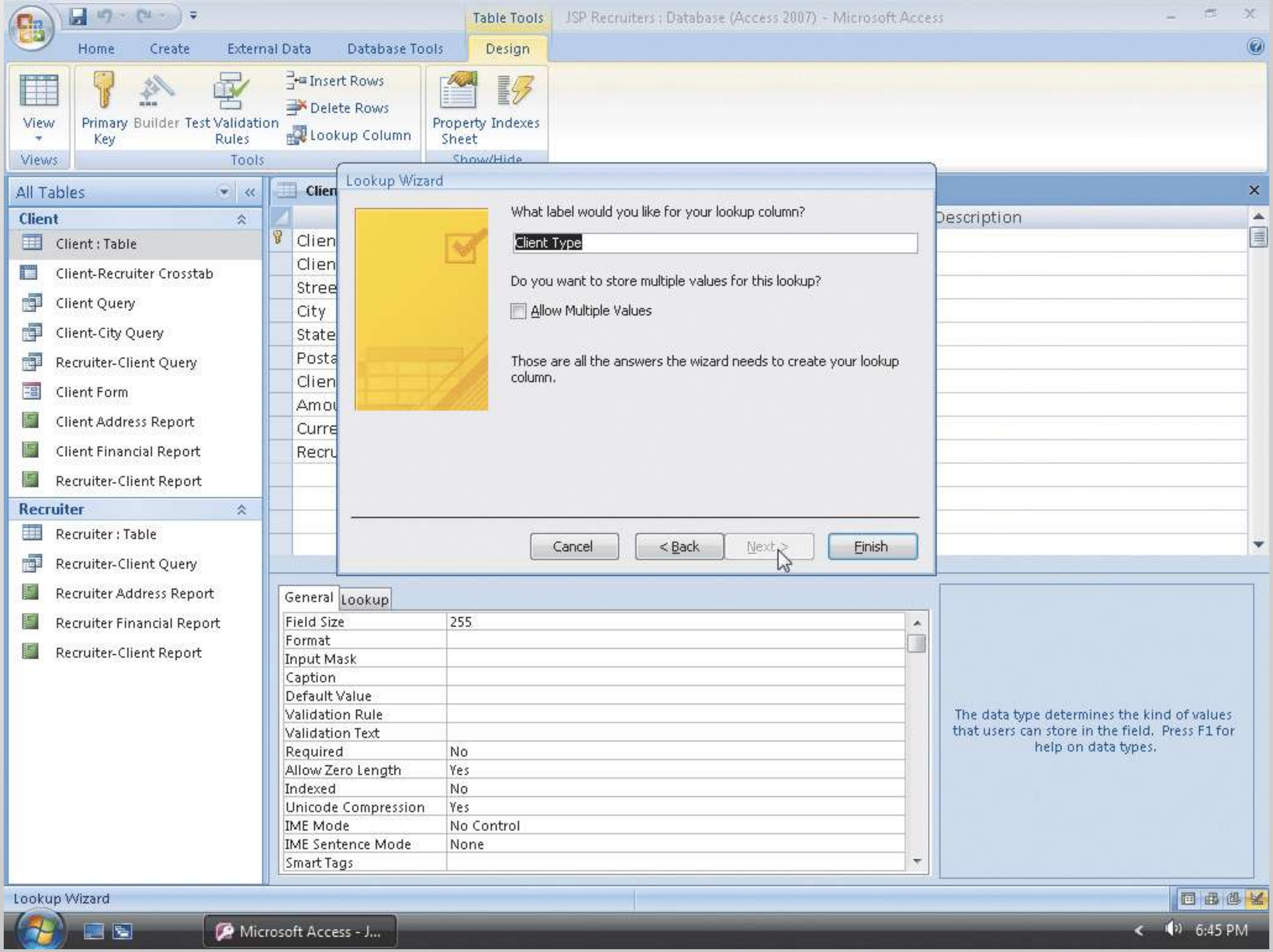
Creating a Lookup Field

- If necessary, click the Data Type column for the Client Type field, and then click the arrow to display the menu of available data types
- Click Lookup Wizard, and then click the 'I will type in the values that I want.' option button to indicate that you will type in the values
- Click the Next button to display the next Lookup Wizard screen
- Click the first row of the table (below Col1), and then type `MED` as the value in the first row
- Press the DOWN ARROW key, and then type `DNT` as the value in the second row

Creating a Lookup Field

- Press the DOWN ARROW key, and then type `LAB` as the value in the third row
- Click the Next button to display the next Lookup Wizard screen
- Ensure Client Type is entered as the label for the lookup column and that the Allow Multiple Values check box is NOT checked
- Click the Finish button to complete the definition of the Lookup Wizard field

Creating a Lookup Field



Adding a Multivalued Field

- Click the row selector for the Amount Paid field, and then press the INSERT key to insert a blank row
- Click the Field Name column for the new field, type `Specialties Needed` as the field name, and then press the DOWN ARROW key
- Click the Data Type column for the Specialties Needed field, and then click Lookup Wizard in the menu of available data types to start the Lookup Wizard
- Click the ‘I will type in the values that I want.’ option button to indicate that you will type in the values
- Click the Next button to display the next Lookup Wizard screen
- Click the first row of the table (below Col1), and then type `CLS` as the value in the first row

Adding a Multivalued Field

- Enter the remaining values from the first column in Table 3–1 on page AC 160. Before typing each value, press the TAB key to move to a new row
- Click the Next button to display the next Lookup Wizard screen
- Ensure Specialties Needed is entered as the label for the lookup column
- Click the Allow Multiple Values check box to allow multiple values
- Click the Finish button to complete the definition of the Lookup Wizard field

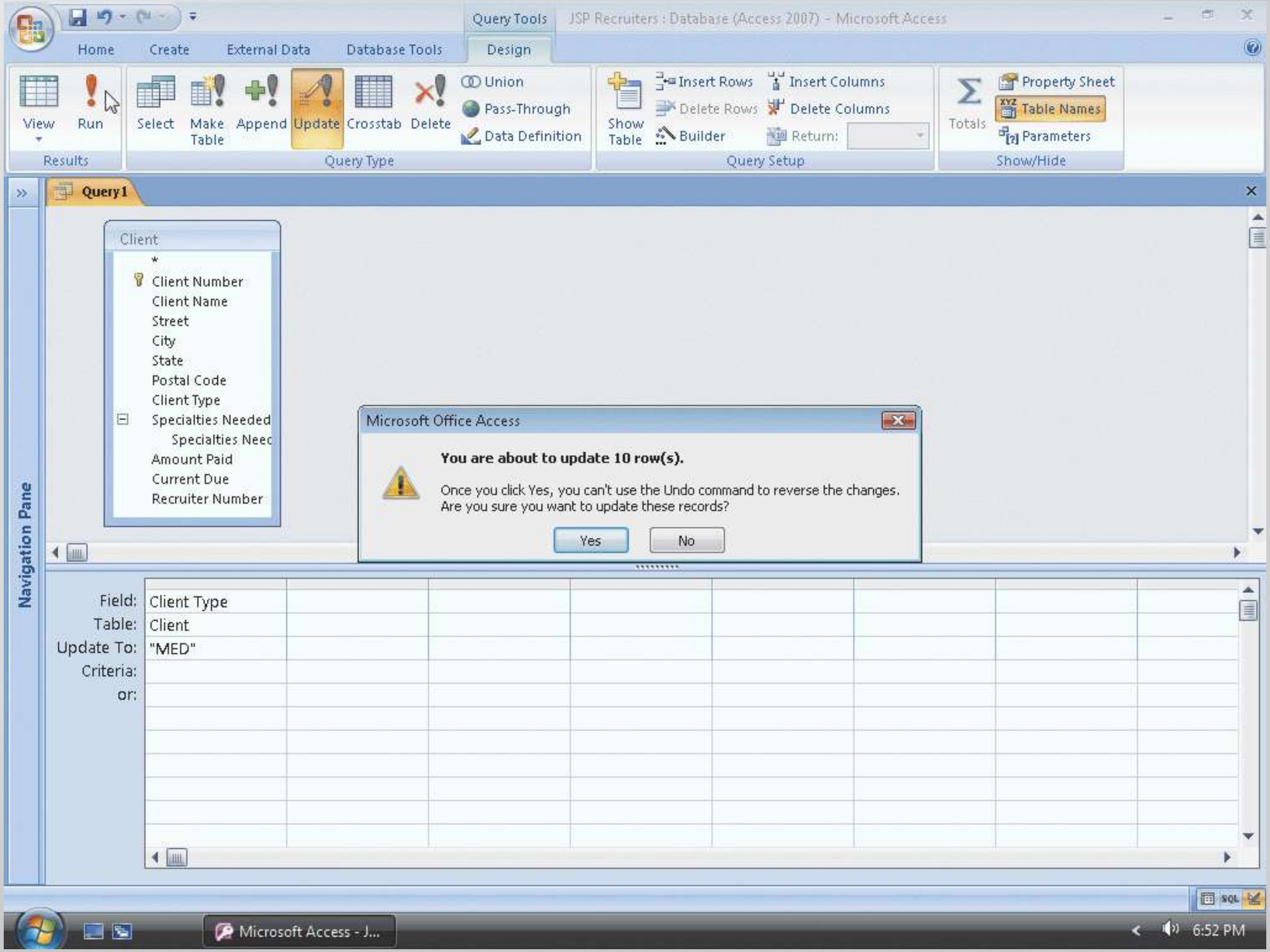
Saving the Changes and Closing the Table

- Click the Save button on the Quick Access Toolbar to save the changes
- Click the Close 'Client' button

Using an Updated Query

- Create a new query for the Client table
- Click the Update button on the Design tab, double-click the Client Type field to select the field, click the Update To row in the first column of the design grid, and then type MED as the new value
- Click the Run button on the Design tab to run the query and update the records
- Click the Yes button to make the changes

Using an Updated Query

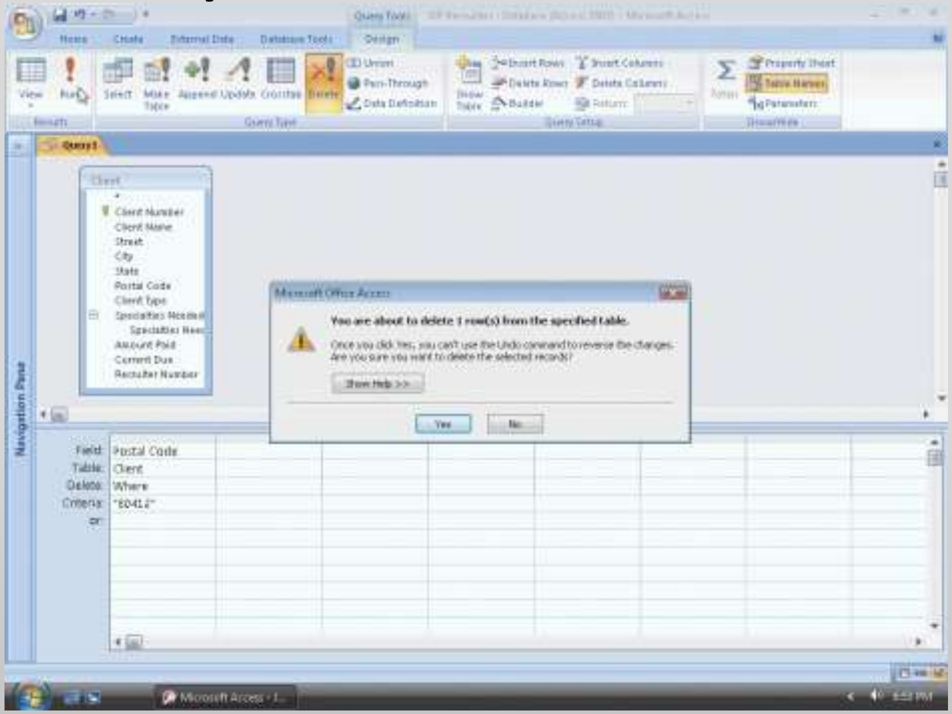


Using a Delete Query

- Clear the grid
- Click the Delete button on the Design tab to make the query a Delete query
- Double-click the Postal Code field to select the field
- Click the Criteria row for the Postal Code field and type `80412` as the criterion

Using a Delete Query

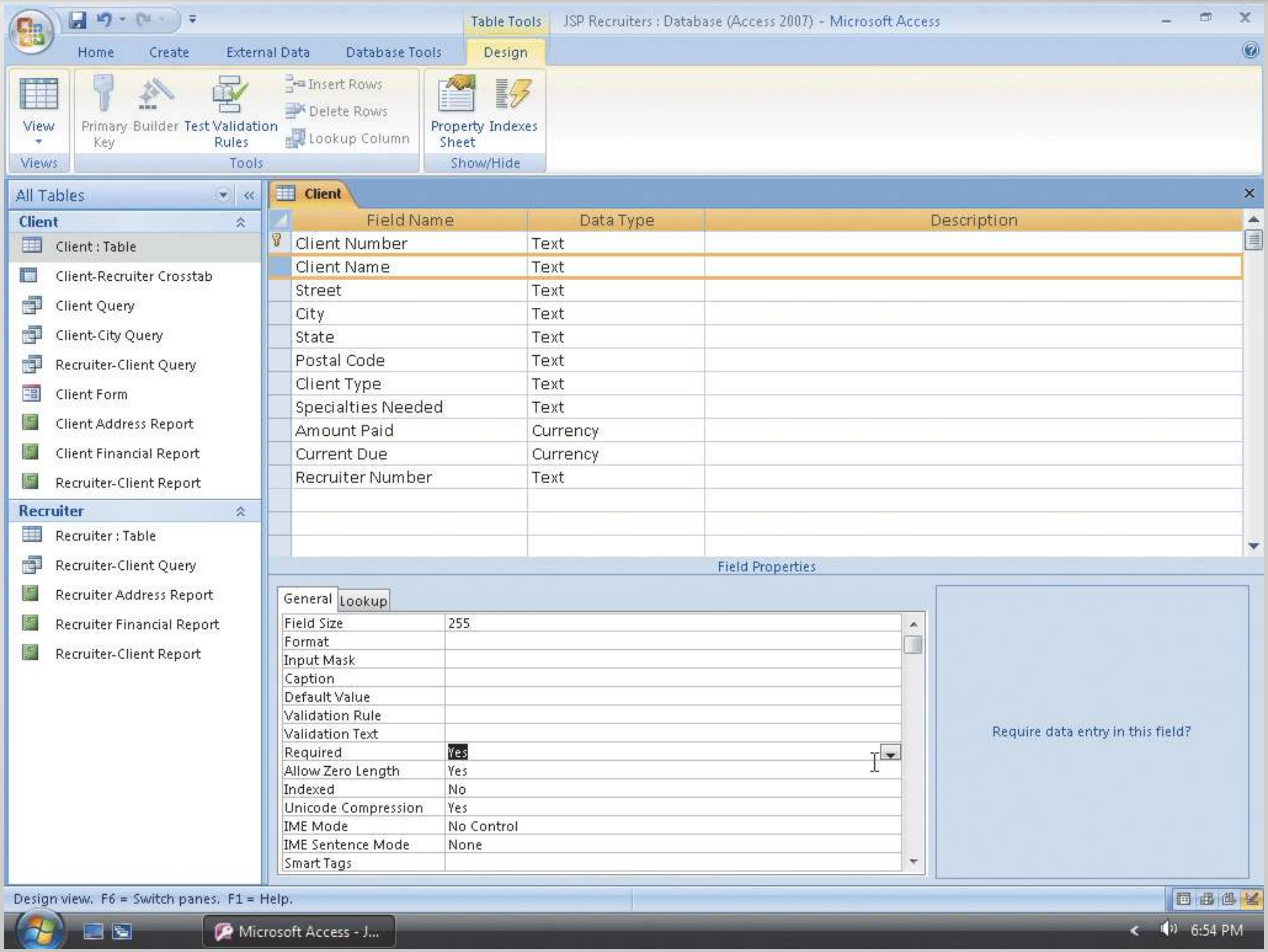
- Run the query by clicking the Run button
- Click the Yes button to complete the deletion
- Close the Query window. Do not save the query



Specifying a Required Field

- Show the Navigation pane, and then open the Client table in Design view
- Select the Client Name field by clicking its row selector
- Click the Required property box in the Field Properties pane, and then click the down arrow that appears
- Click Yes in the list

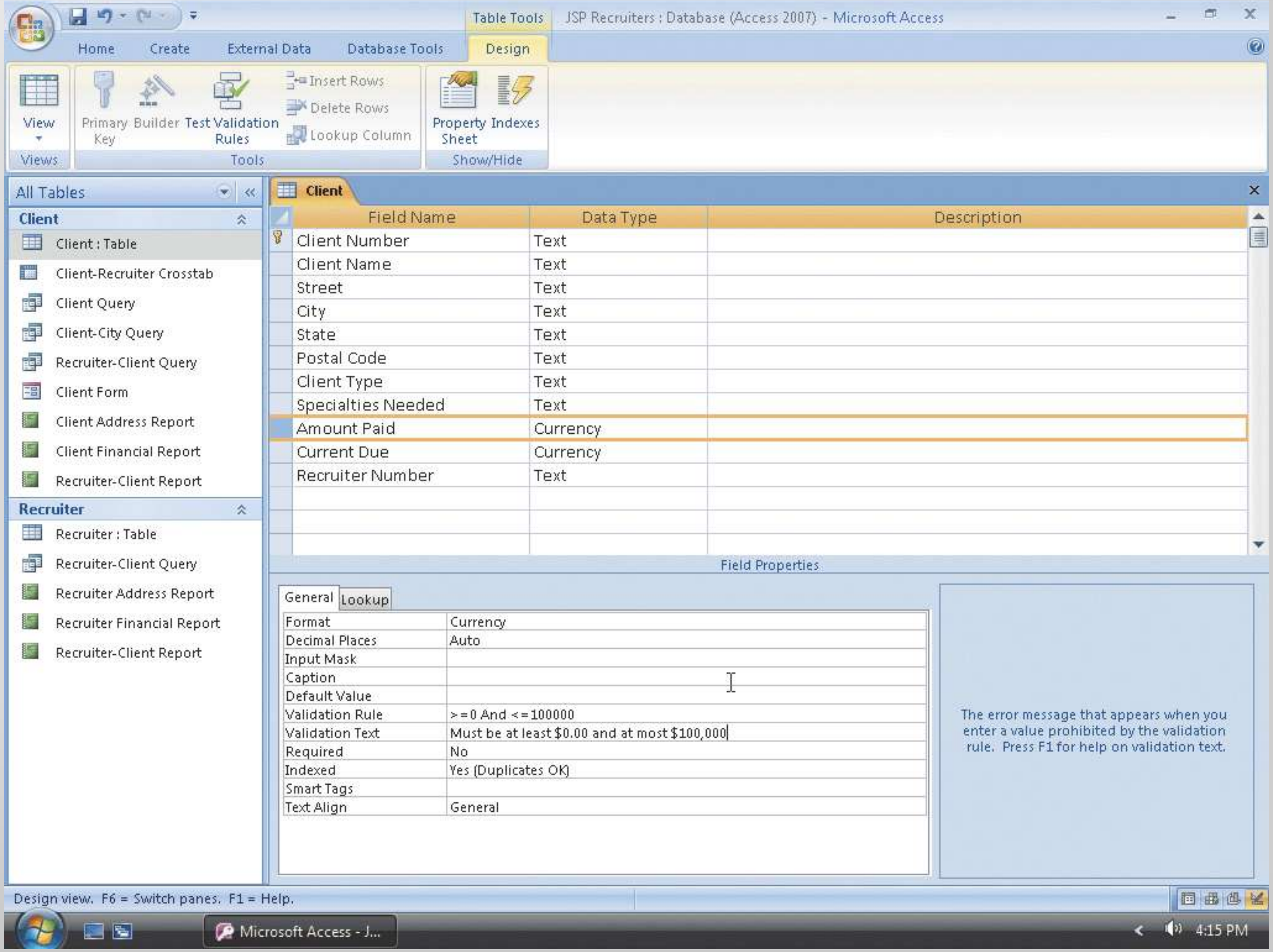
Specifying a Required Field



Specifying a Range

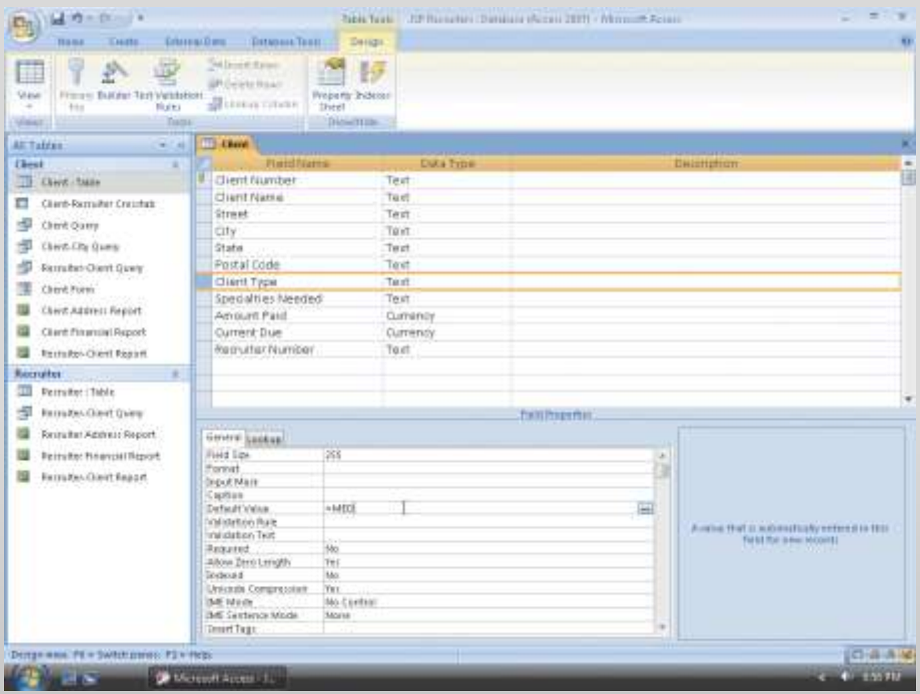
- Select the Amount Paid field by clicking its row selector, click the Validation Rule property box to produce an insertion point, and then type `>=0 and <=100000` as the rule
- Click the Validation Text property box to produce an insertion point, and then type `Must be at least $0.00 and at most $100,000` as the text

Specifying a Range



Specifying a Default Value

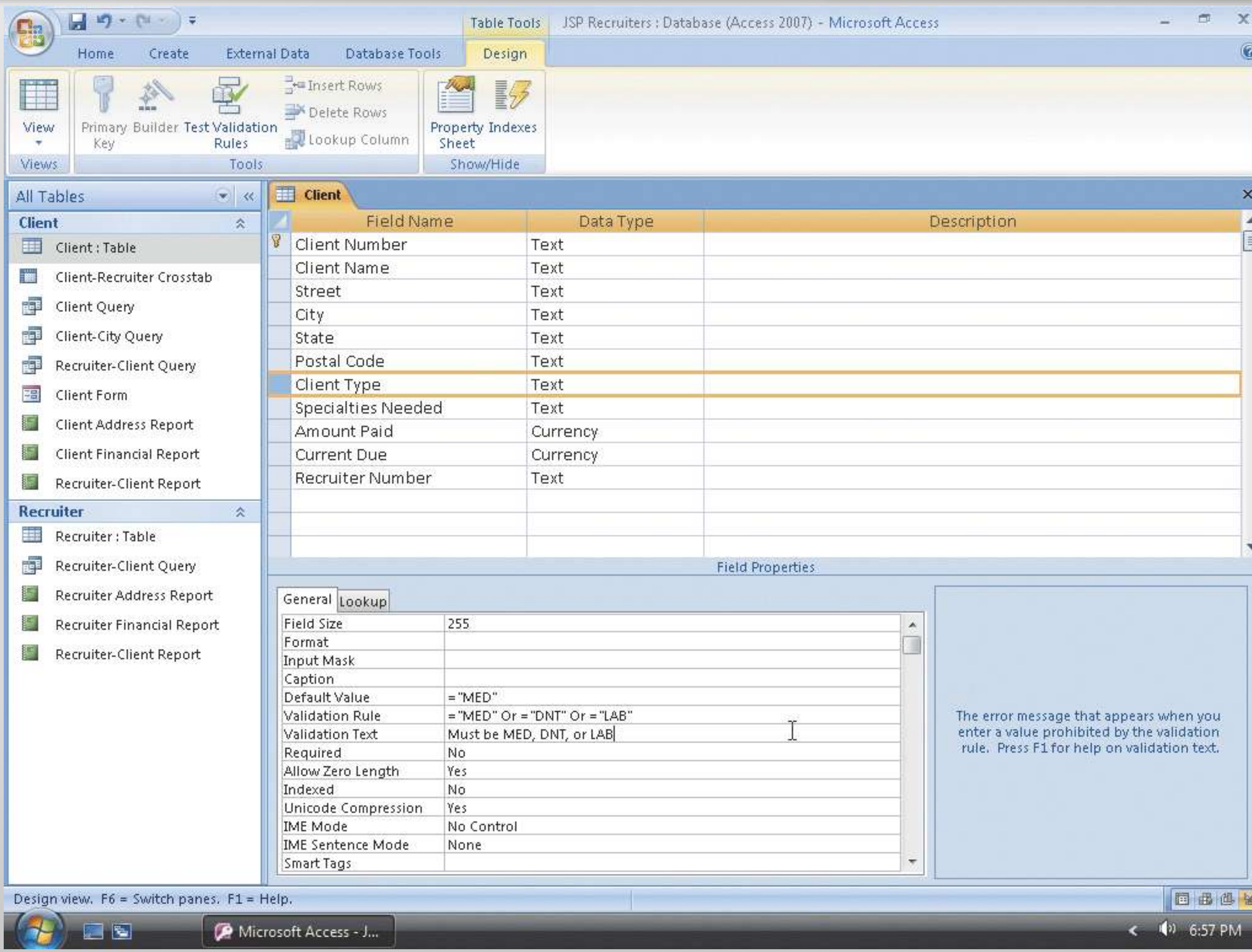
- Select the Client Type field. Click the Default Value property box to produce an insertion point, and then type =MED as the value



Specifying a Collection of Allowable Values

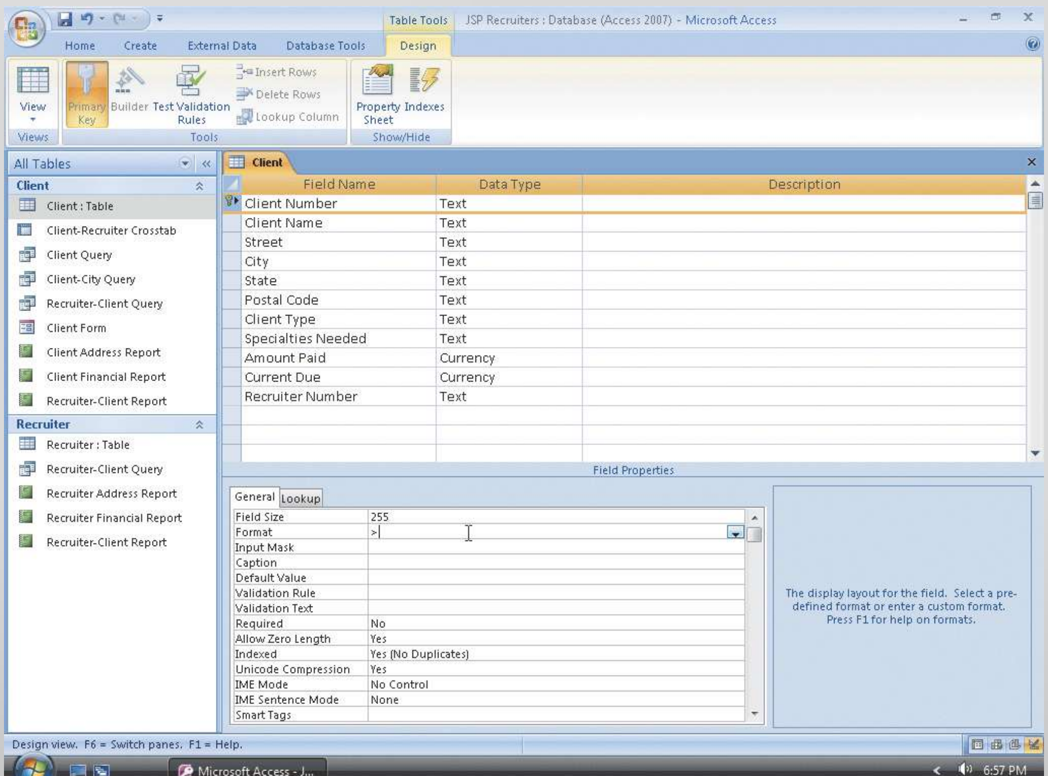
- Make sure the Client Type field is selected
- Click the Validation Rule property box to produce an insertion point and then type `=MED or =DNT or =LAB` as the validation rule
- Click the Validation Text property box and then type `Must be MED, DNT, or LAB` as the validation text

Specifying a Collection of Allowable Values



Specifying a Format

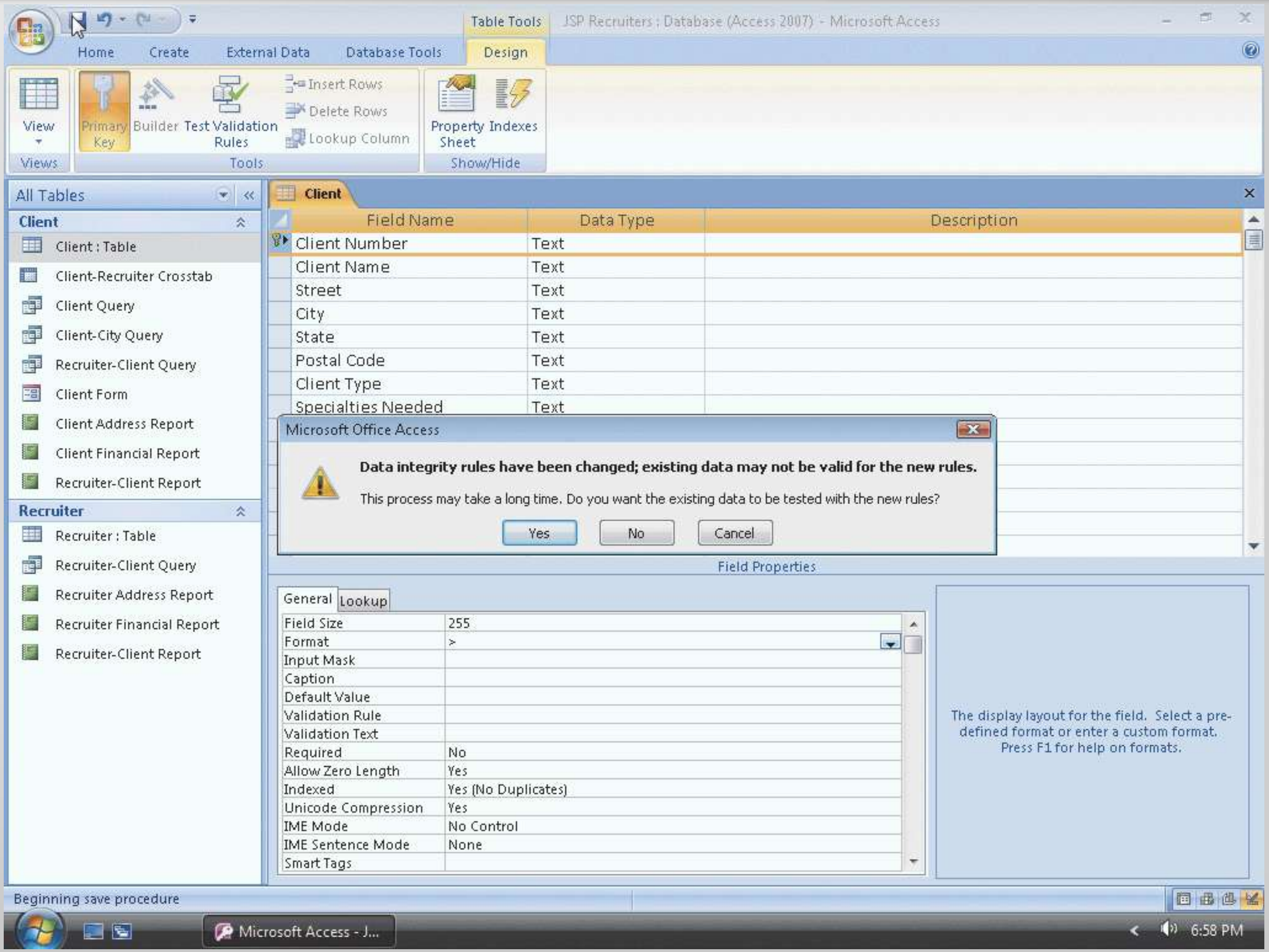
- Select the Client Number field
- Click the Format property box and then type >



Saving the Validation Rules, Default Values, and Formats

- Click the Save button on the Quick Access Toolbar to save the changes
- Click the No button to save the changes without testing current data
- Close the Client table

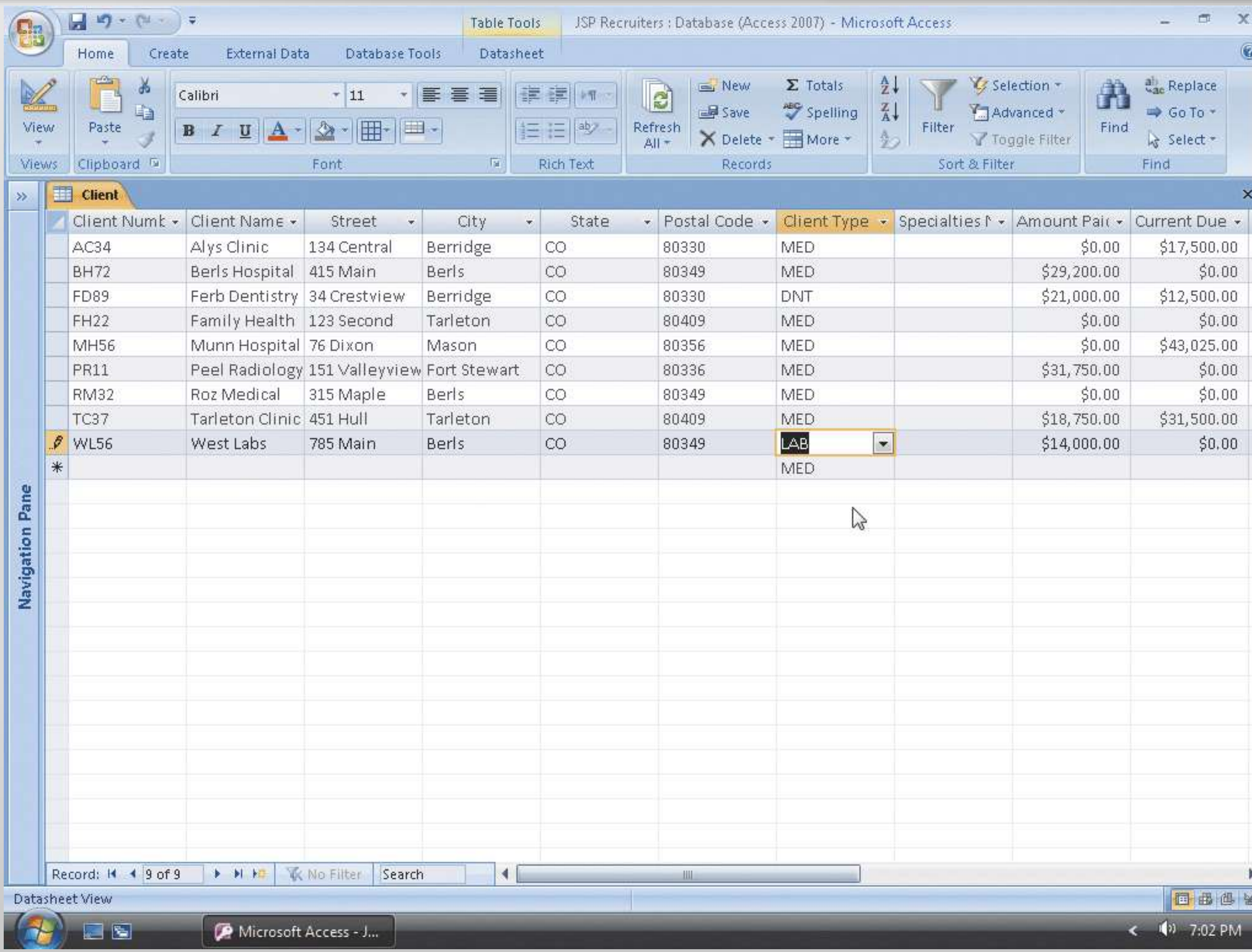
Saving the Validation Rules, Default Values, and Formats



Using a Lookup Field

- Open the Client table in Datasheet view and ensure the Navigation pane is hidden
- Click in the Client Type field on the third record to display the arrow
- Click the down arrow to display the drop-down list of available choices for the Client Type field
- Click DNT to change the value
- In a similar fashion, change MED on the ninth record to LAB

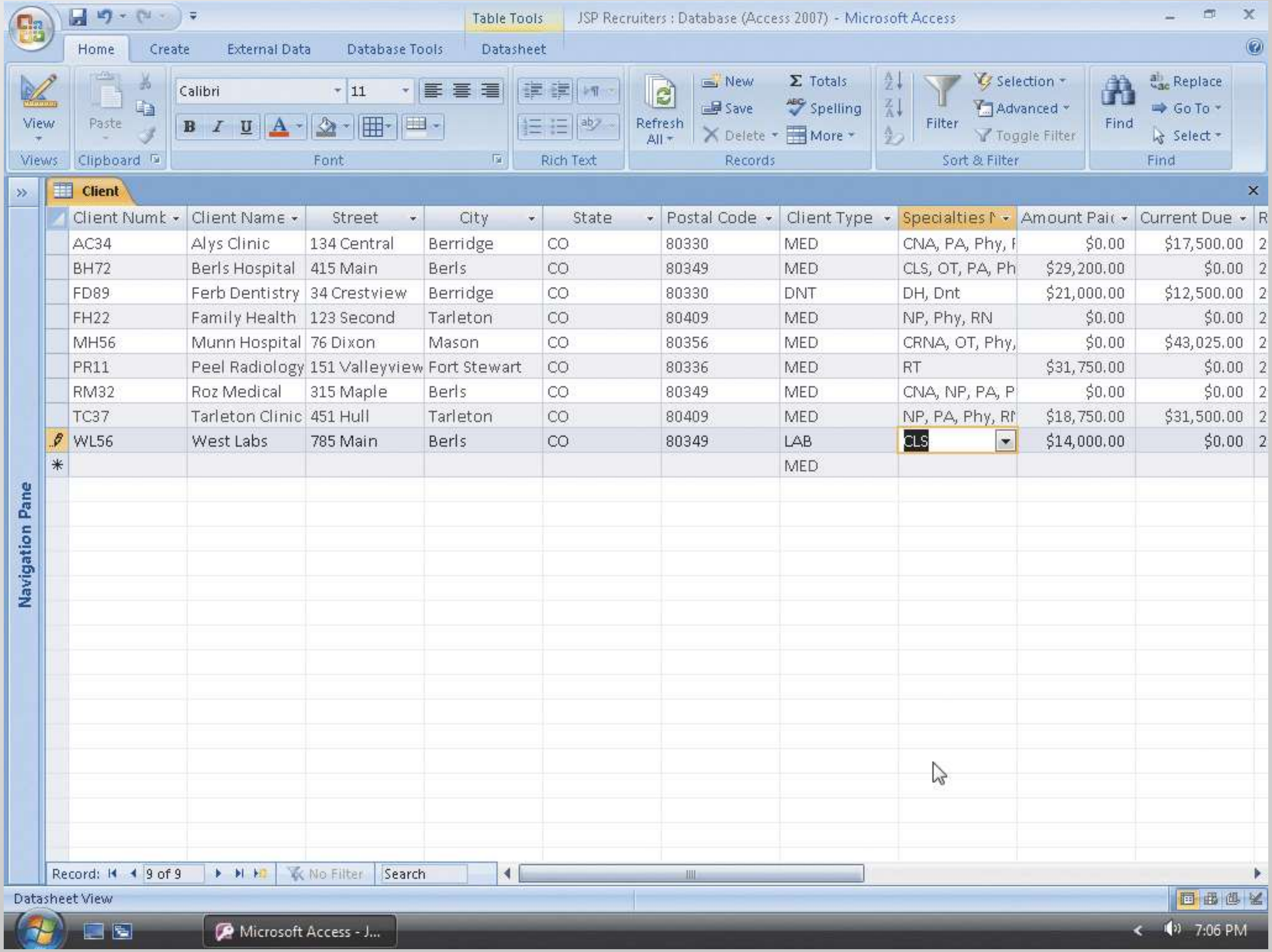
Using a Lookup Field



Using a Multivalued Lookup Field

- Click the Specialties Needed field on the first record to display the arrow
- Click the arrow to display the list of available specialties
- Click the CNA, PA, Phy, and RN check boxes to select the specialties for the first client
- Click the OK button to complete the selection
- Using the same technique, enter the specialties given in Figure 3–47 on page AC 173 for the remaining clients

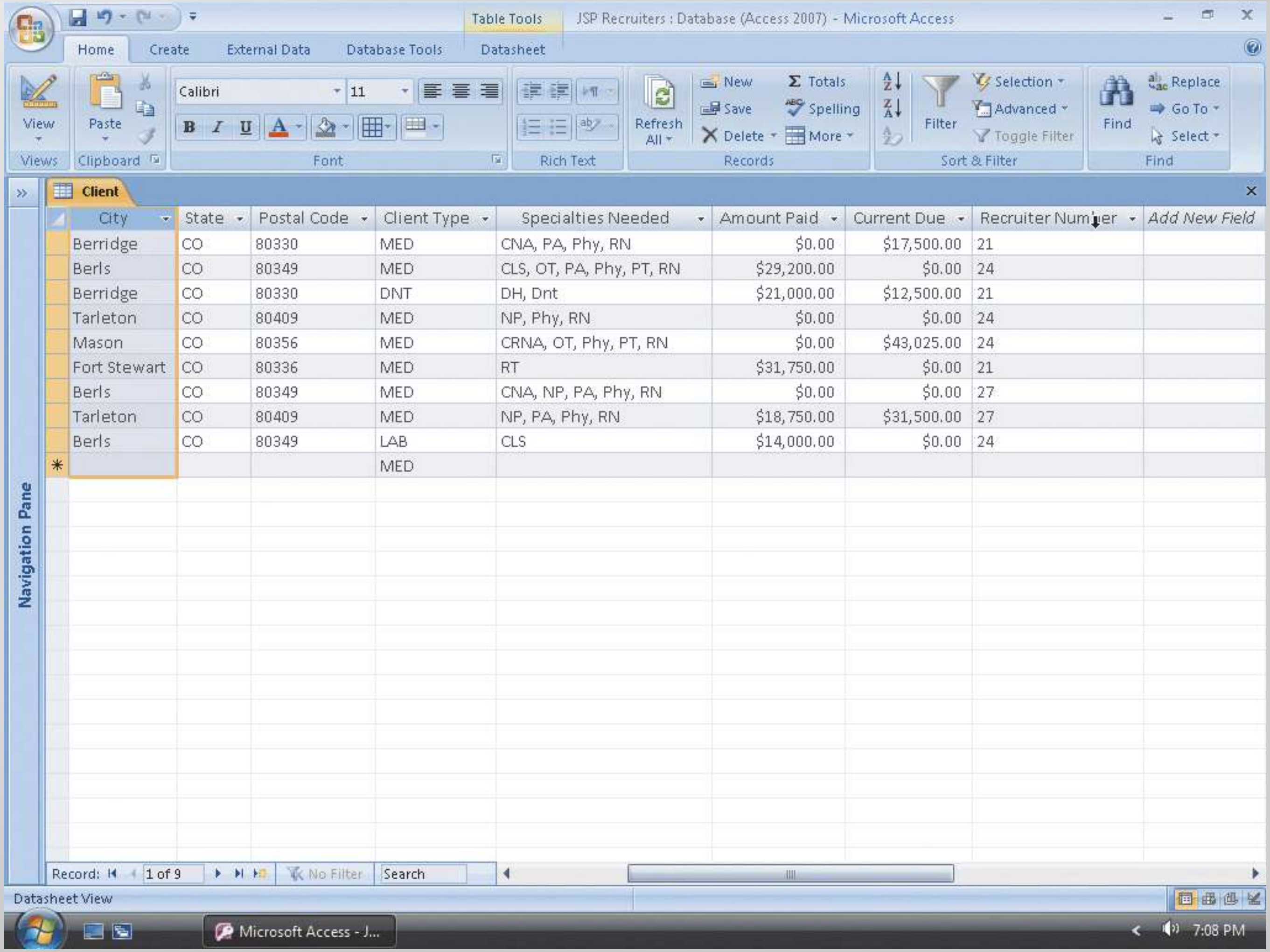
Using a Multivalued Lookup Field



Resizing a Column in a Datasheet

- Point to the right boundary of the field selector for the Specialties Needed field so that the mouse pointer becomes a doubled-ended arrow
- Double-click the right boundary of the field selector for the Specialties Needed field to resize the field so that it best fits the data
- Use the same technique to resize all the other fields to best fit the data. To resize the Amount Paid, Current Due, and Recruiter Number fields, you will need to scroll the fields by clicking the right scroll arrow shown in Figure 3–52 on page AC 175
- Save the changes to the layout by clicking the Save button on the Quick Access Toolbar
- Close the Client table

Resizing a Column in a Datasheet



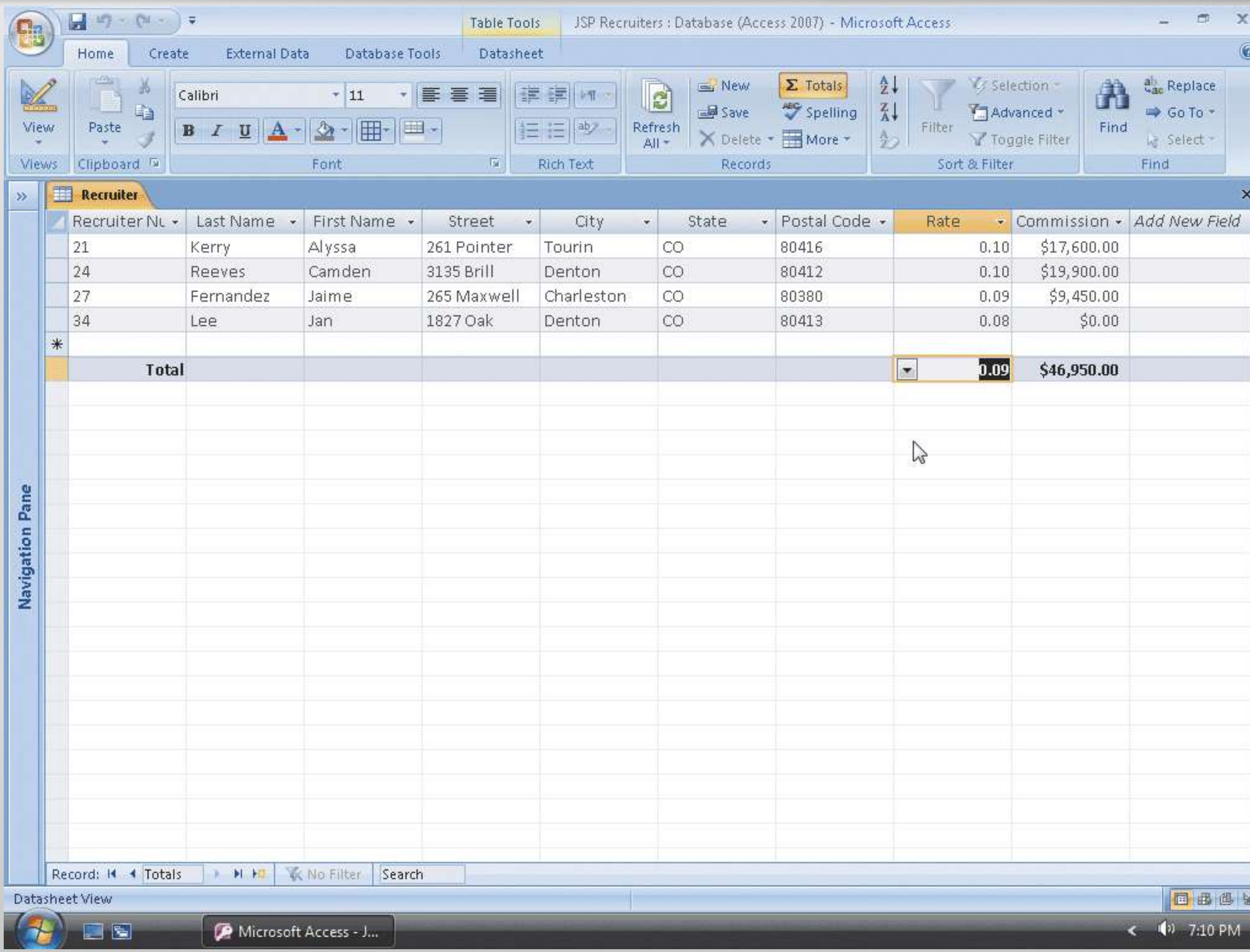
Including Totals in a Datasheet

- Open the Recruiter table in Datasheet view and hide the Navigation pane
- Click the Totals button on the Home tab to include the Total row in the datasheet
- Click the Total row in the Commission column to display an arrow
- Click the arrow to display a menu of available computations

Including Totals in a Datasheet

- Click Sum to calculate the sum of the commissions
- Click the Total row in the Rate column to display an arrow
- Click the arrow to display a menu of available computations
- Click Average to calculate the average of the rates

Including Totals in a Datasheet



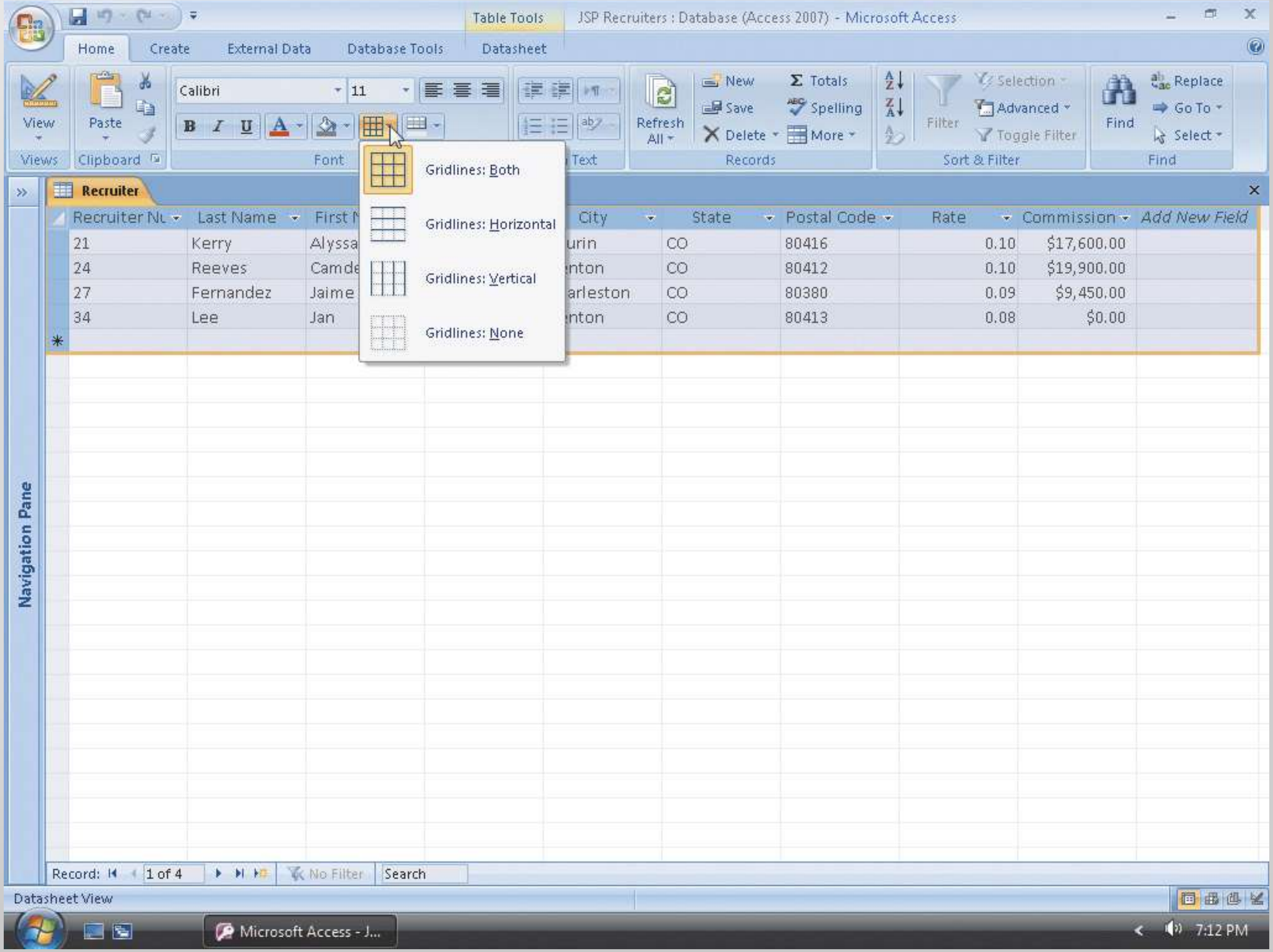
Removing Totals from a Datasheet

- Click the Totals button on the Home tab to remove the Total row from the datasheet

Changing Gridlines in a Datasheet

- Open the Recruiter table in Datasheet view, if it is not already open
- Click the box in the upper-left corner of the Datasheet selector to select the entire datasheet
- Click the Gridlines button on the Home tab to display the Gridlines gallery
- Click the Gridlines: Horizontal command in the Gridlines gallery to include only horizontal gridlines

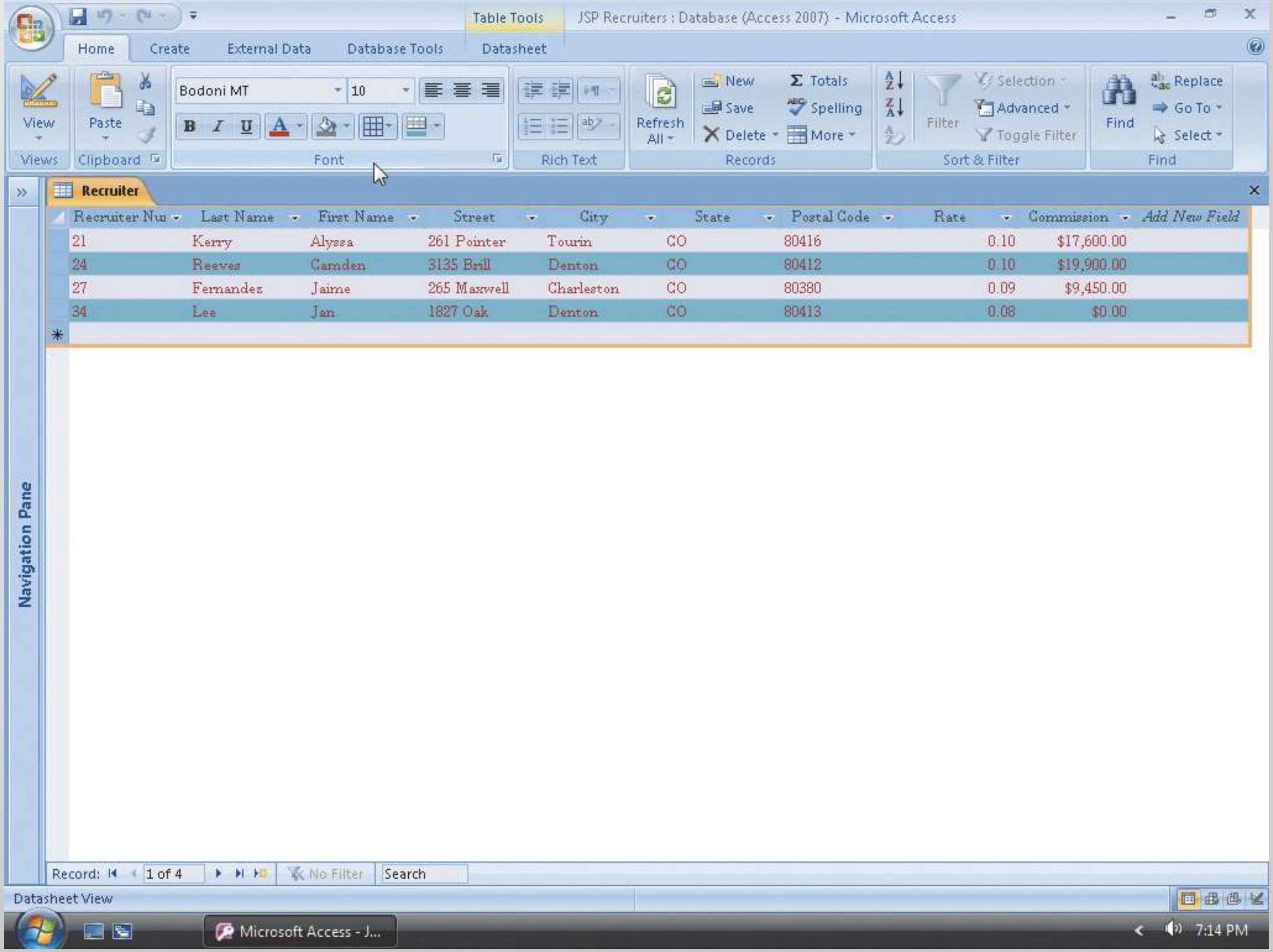
Changing Gridlines in a Datasheet



Changing the Colors and Font in a Datasheet

- With the datasheet for the Recruiter table selected, click the Alternate Fill/Back Color button arrow to display the color palette
- Click Aqua Blue (the second from the right color in the standard colors) to select aqua blue as the alternate color
- Click the Font Color arrow, and then click Red (the second color in the bottom row) in the lower-left corner of standard colors to select Red as the font color
- Click the Font box arrow, and then select Bodoni MT as the font. (If it is not available, select any font of your choice.)
- Click the Font Size box arrow and select 10 as the font size

Changing the Colors and Font in a Datasheet



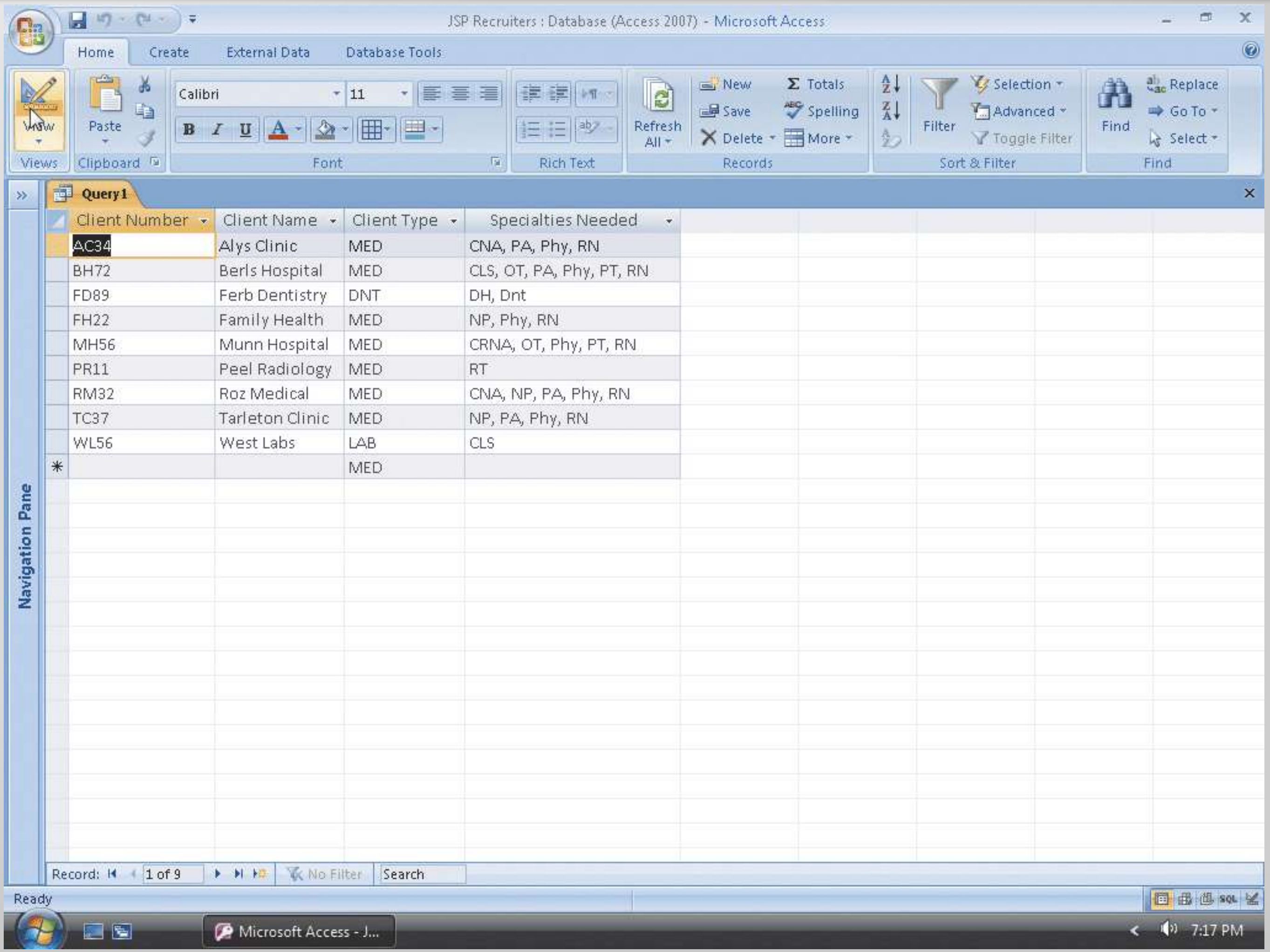
Closing the Datasheet Without Saving the Format Changes

- Click the Close ‘Recruiter’ button to close the Recruiter table
- Click the No button in the Microsoft Office Access dialog box when asked if you want to save your changes

Querying a Multivalued Field Showing Multiple Values on a Single Row

- Create a query for the Client table and hide the Navigation pane
- Include the Client Number, Client Name, Client Type, and Specialties Needed fields
- View the results

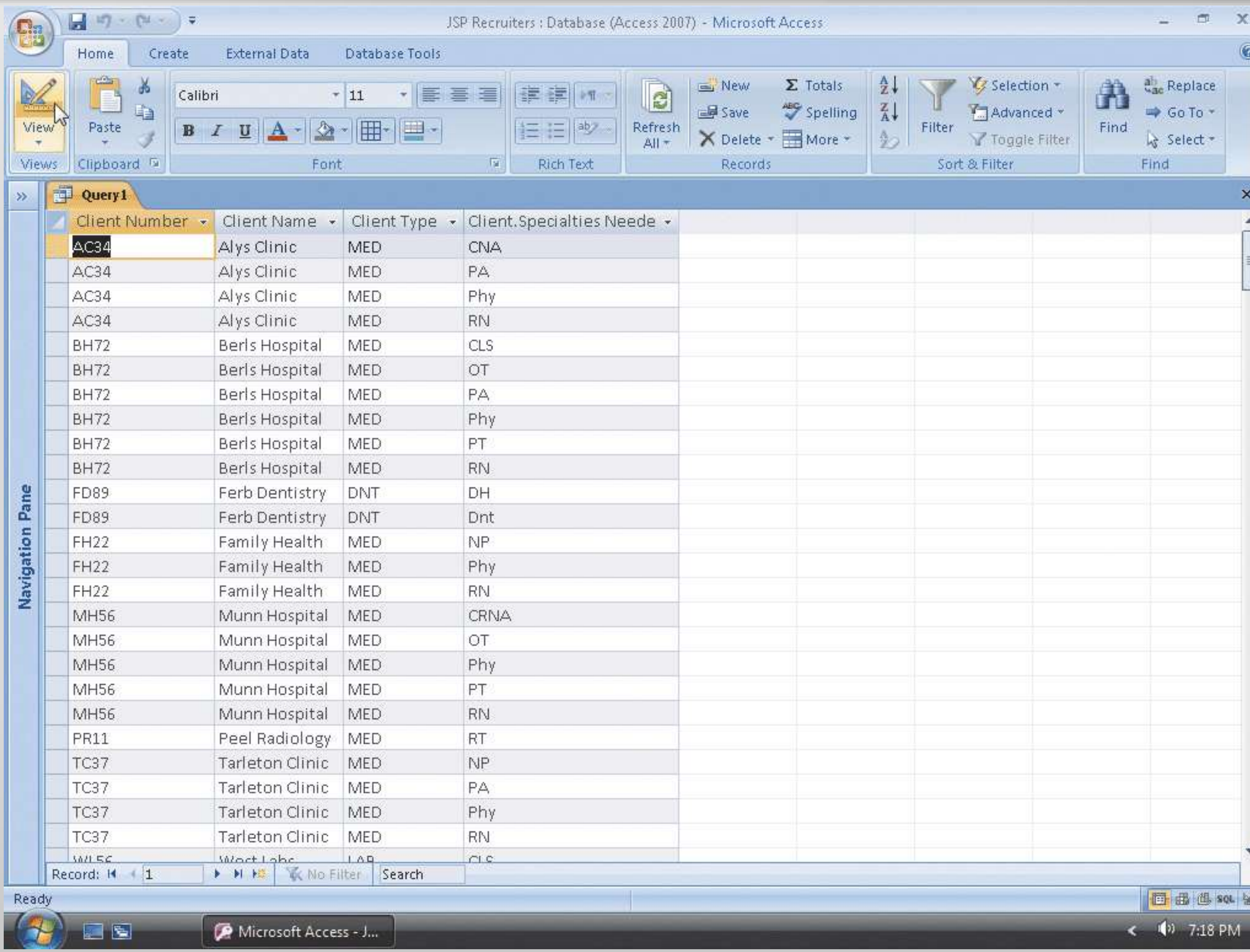
Querying a Multivalued Field Showing Multiple Values on a Single Row



Querying a Multivalued Field Showing Multiple Values on Multiple Rows

- Return to Design view and ensure the Client Number, Client Name, Client Type, and Specialties Needed fields are selected
- Click the Specialties Needed field to produce an insertion point, and then type a period and the word `Value` after the word, Needed, to use the Value property
- View the results
- Close the query by clicking the Close ‘Query1’ button
- When asked if you want to save the query, click the No button

Querying a Multivalued Field Showing Multiple Values on Multiple Rows



Client Number	Client Name	Client Type	Client.Specialties Neede
AC34	Alys Clinic	MED	CNA
AC34	Alys Clinic	MED	PA
AC34	Alys Clinic	MED	Phy
AC34	Alys Clinic	MED	RN
BH72	Berls Hospital	MED	CLS
BH72	Berls Hospital	MED	OT
BH72	Berls Hospital	MED	PA
BH72	Berls Hospital	MED	Phy
BH72	Berls Hospital	MED	PT
BH72	Berls Hospital	MED	RN
FD89	Ferb Dentistry	DNT	DH
FD89	Ferb Dentistry	DNT	Dnt
FH22	Family Health	MED	NP
FH22	Family Health	MED	Phy
FH22	Family Health	MED	RN
MH56	Munn Hospital	MED	CRNA
MH56	Munn Hospital	MED	OT
MH56	Munn Hospital	MED	Phy
MH56	Munn Hospital	MED	PT
MH56	Munn Hospital	MED	RN
PR11	Peel Radiology	MED	RT
TC37	Tarleton Clinic	MED	NP
TC37	Tarleton Clinic	MED	PA
TC37	Tarleton Clinic	MED	Phy
TC37	Tarleton Clinic	MED	RN

Specifying Referential Integrity

- Click Database Tools on the Ribbon to display the Database Tools tab
- Click the Relationships button on the Database Tools tab to open the Relationships window and display the Show Table dialog box
- Click the Recruiter table and then click the Add button to add the Recruiter table
- Click the Client table and then click the Add button to add the Client table

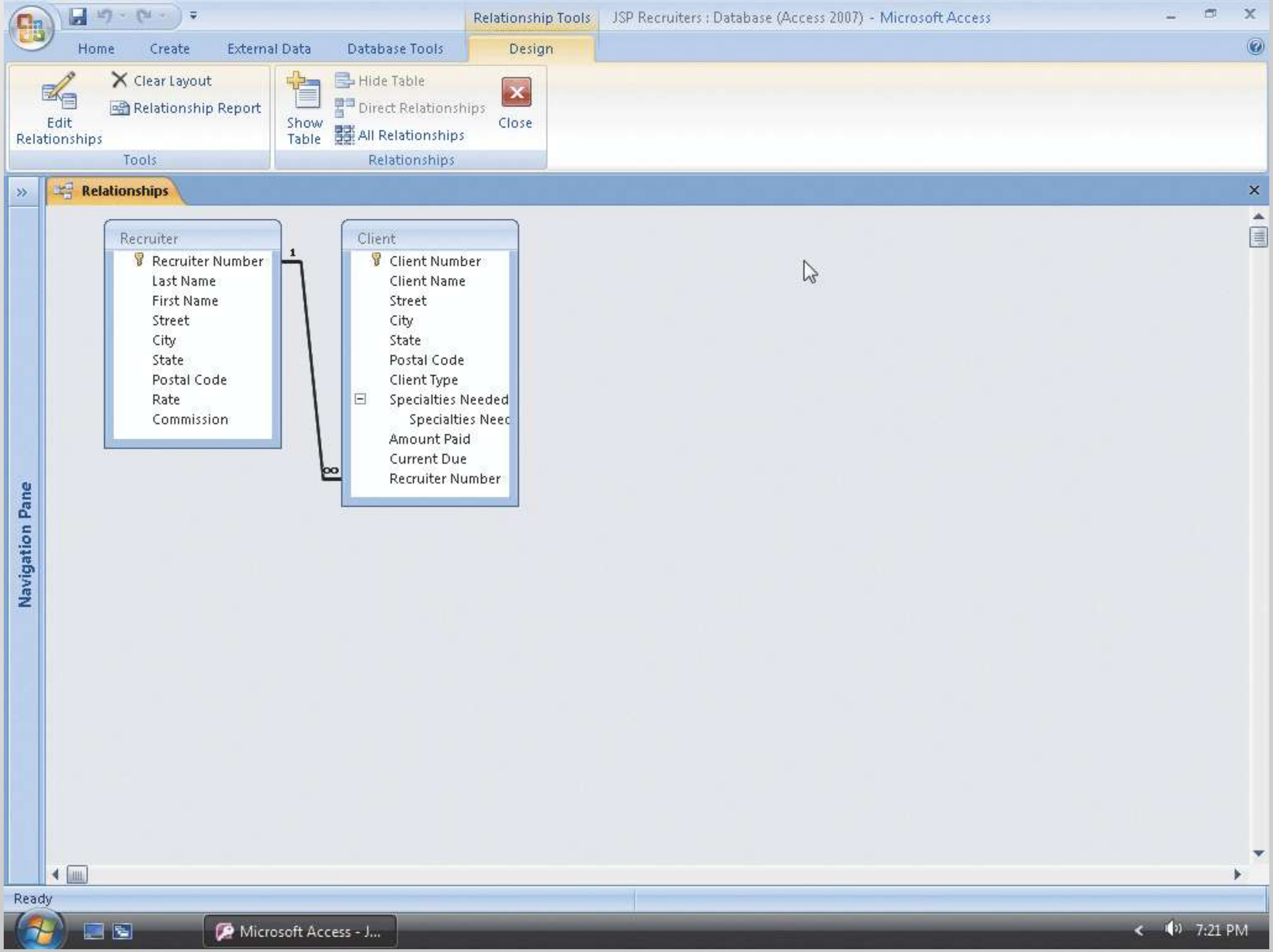
Specifying Referential Integrity

- Click the Close button in the Show Table dialog box to close the dialog box
- Resize the field lists that appear so all fields are visible
- Drag the Recruiter Number field in the Recruiter table field list to the Recruiter Number field in the Client table field list to open the Edit Relationships dialog box to create a relationship
- Click the Enforce Referential Integrity check box

Specifying Referential Integrity

- Click the Cascade Update Related Fields check box
- Click the Create button to complete the creation of the relationship
- Click the Save button on the Quick Access Toolbar to save the relationship you created
- Close the Relationships window by clicking the Close 'Relationships' button

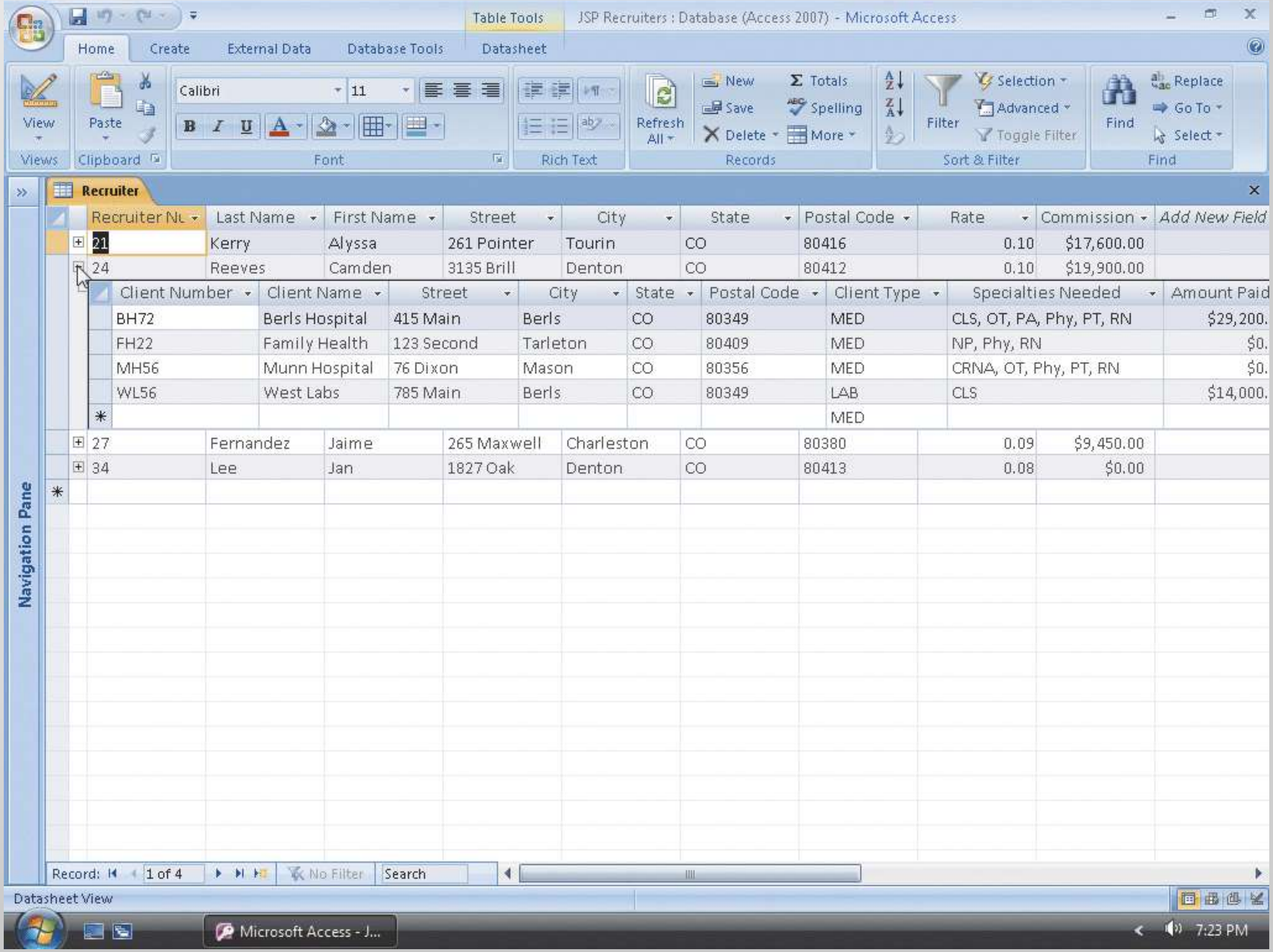
Specifying Referential Integrity



Using a Subdatasheet

- Open the Recruiter table and hide the Navigation pane
- Click the plus sign in front of the row for Recruiter 24 to display the subdatasheet
- Close the datasheet for the Recruiter table

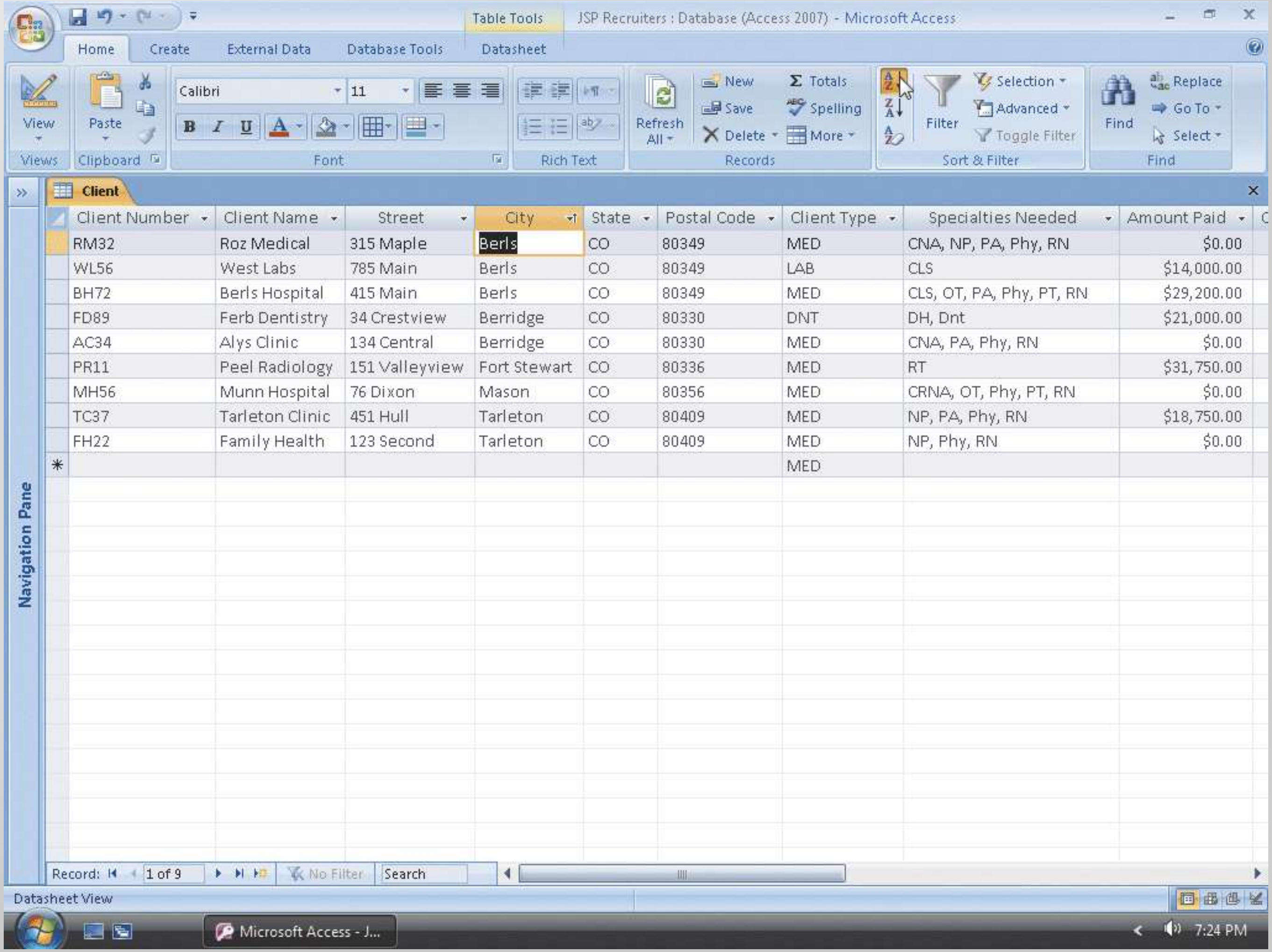
Using a Subdatasheet



Using the Ascending Button to Order Records

- Open the Client table in Datasheet view and hide the Navigation pane
- Click the City field on the first record to select the field
- Click the Ascending button on the Home tab to sort the records by City
- Close the table. When asked if you want to save your changes, click the No button

Using the Ascending Button to Order Records



Quitting Access

- Click the Close button on the right side of the Access title bar to quit Access

Summary

- Add, change, and delete records
- Search for records
- Filter records
- Update a table design
- Format a datasheet
- Use action queries to update records

Summary

- Specify validation rules, default values, and formats
- Create and use single-valued and multivalued Lookup fields
- Specify referential integrity
- Use a subdatasheet
- Sort records

Microsoft Office 2007

Access Chapter 3 Complete