Microsoft Office 2007

Access Chapter 2

Querying a Database

Objectives

- Create queries using the Simple Query Wizard
- Print query results
- Create queries using Design view
- Include fields in the design grid
- Use text and numeric data in criteria

Objectives

- Create and use parameter queries
- Save a query and use the saved query
- Use compound criteria in queries
- Sort data in queries
- Join tables in queries

Objectives

- Create a report from a query
- Perform calculations in queries
- Calculate statistics in queries
- Create crosstab queries
- Customize the Navigation pane

Plan Ahead

- Identify the fields
- Identify restrictions
- Determine whether special order is required
- Determine whether more than one table is required
- Determine whether calculations are required
- If data is to be summarized, determine whether a crosstab query would be appropriate

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 fl ash drive, Drive E in this case, as the new open location. (Your drive letter might be different.)
- Click JSP Recruiters to select the fi le 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
- With the option button to enable this content selected, click the OK button to enable the content

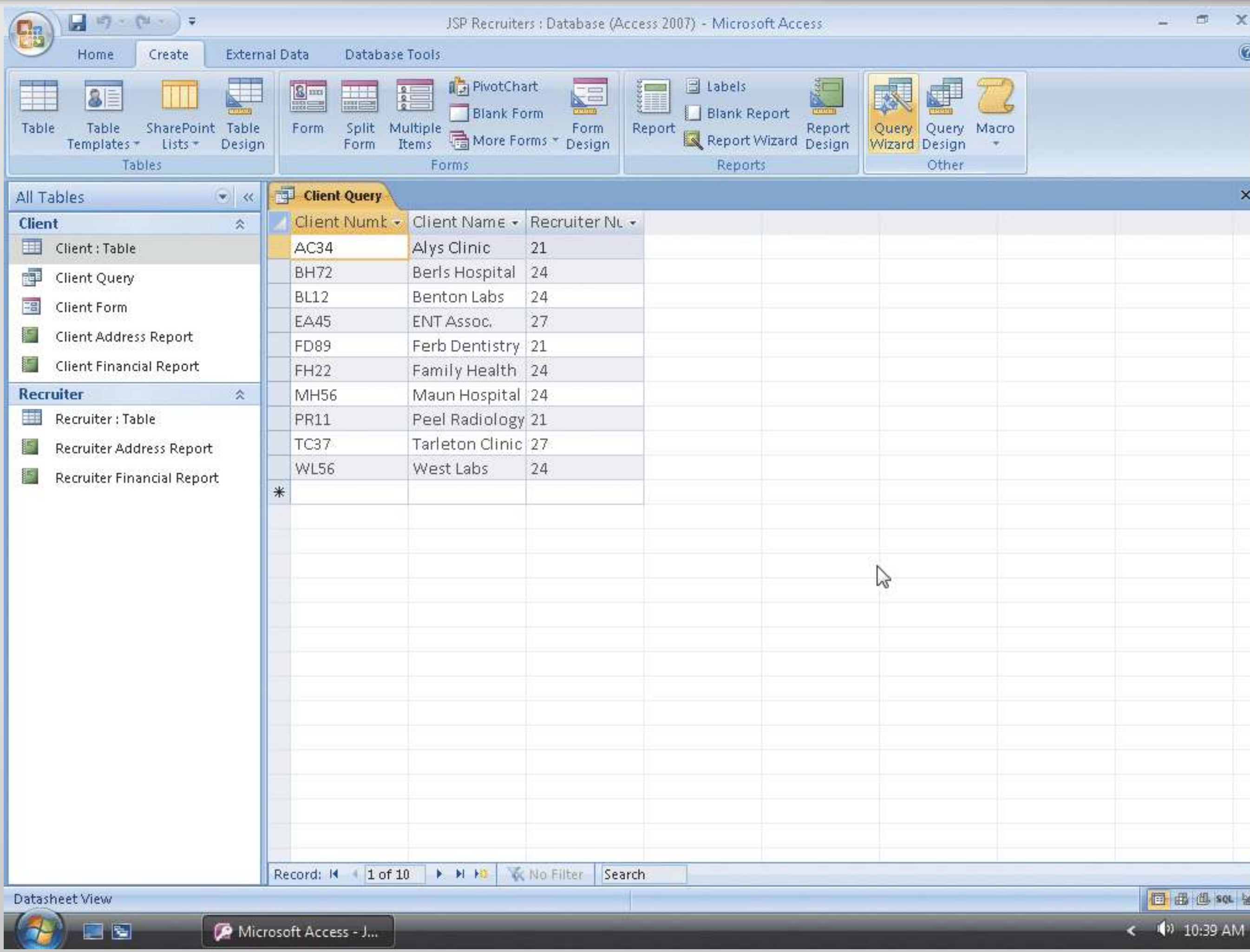
Using the Simple Query Wizard to Create a Query

- If the Navigation pane is hidden, click the Shutter Bar Open/Close Button to show the Navigation pane
- Be sure the Client table is selected
- Click Create on the Ribbon to display the Create tab
- Click the Query Wizard button on the Create tab to display the New Query dialog box
- Be sure Simple Query Wizard is selected, and then click the OK button to display the Simple Query Wizard dialog box
- Click the Add Field button to add the Client Number field

Using the Simple Query Wizard to Create a Query

- Click the Add Field button a second time to add the Client Name field
- Click the Recruiter Number field, and then click the Add Field button to add the Recruiter Number field
- Click the Next button
- Be sure the title of the query is Client Query
- Click the Finish button to create the query
- Click the Close button for the Client Query to remove the query results from the screen

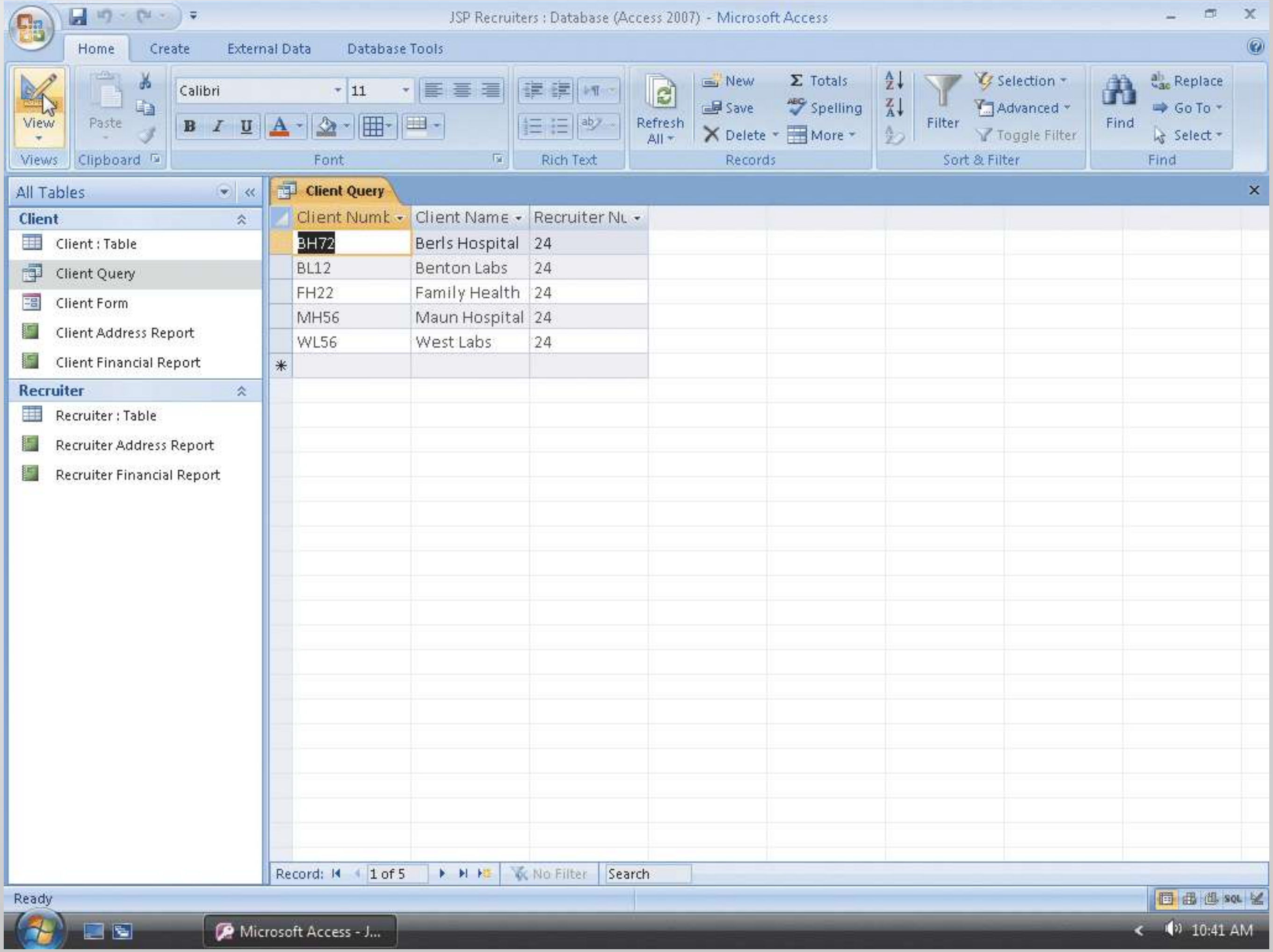
Using the Simple Query Wizard to Create a Query



Using a Criterion in a Query

- Right-click Client Query to produce a shortcut menu
- Click Design View on the shortcut menu to open the query in Design view
- Click the Criteria row in the Recruiter Number column of the grid, and then type `24` as the criterion
- Click the View button to display the results in Datasheet view
- Close the Client Query window by clicking the Close 'Client Query' button
- When asked if you want to save your changes, click the No button

Using a Criterion in a Query



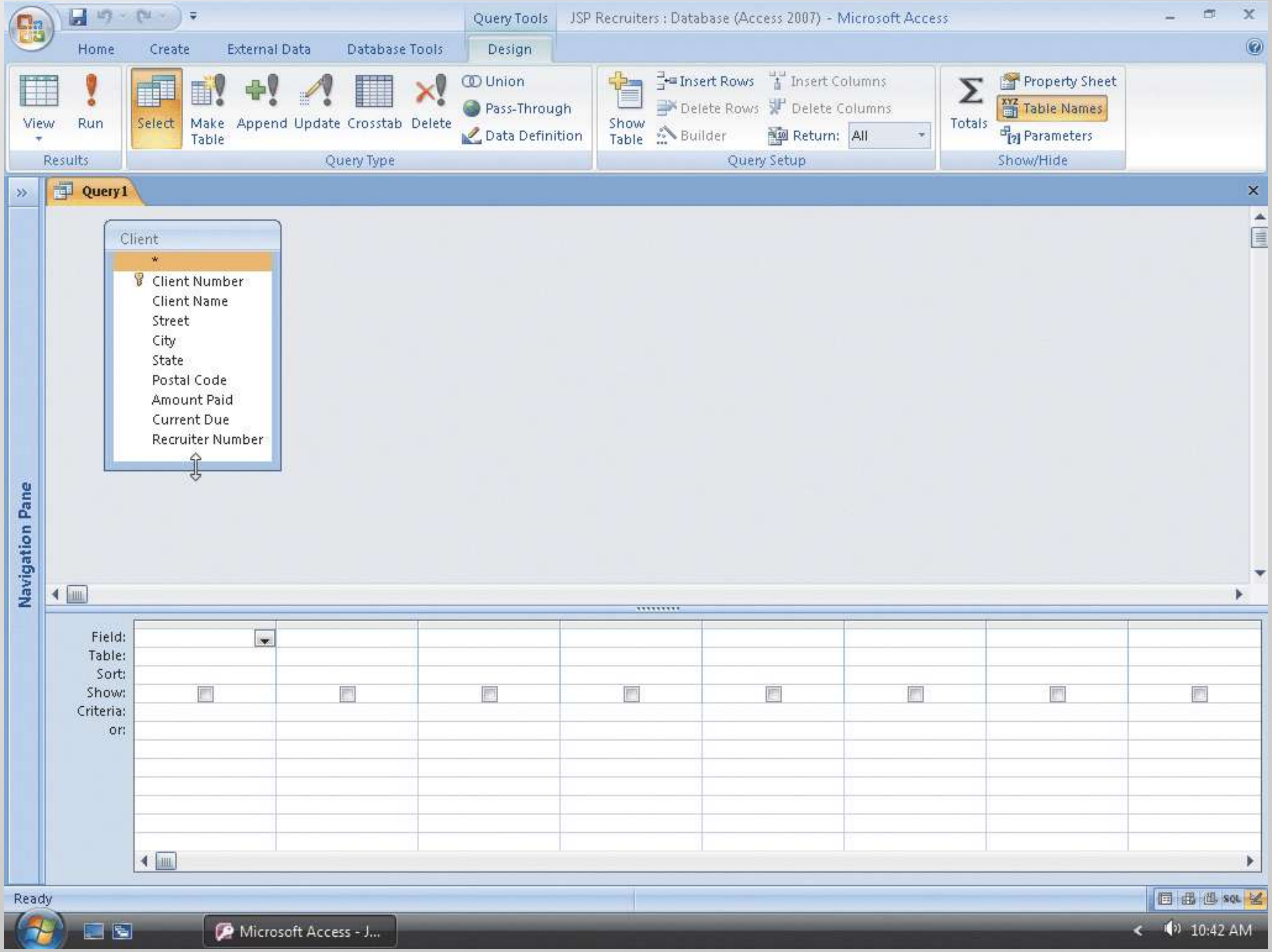
Printing the Results of a Query

- With the Client Query selected in the Navigation pane, click the Office Button
- Point to Print on the Office button menu
- Click Quick Print on the Print submenu

Creating a Query in Design View

- Hide the Navigation pane
- Click Create on the Ribbon to display the Create tab
- Click the Query Design button to create a new query
- With the Client table selected, click the Add button in the Show Table dialog box to add the Client table to the query
- Click the Close button in the Show Table dialog box to remove the dialog box from the screen
- Drag the lower edge of the field box down far enough so all fields in the Client table appear

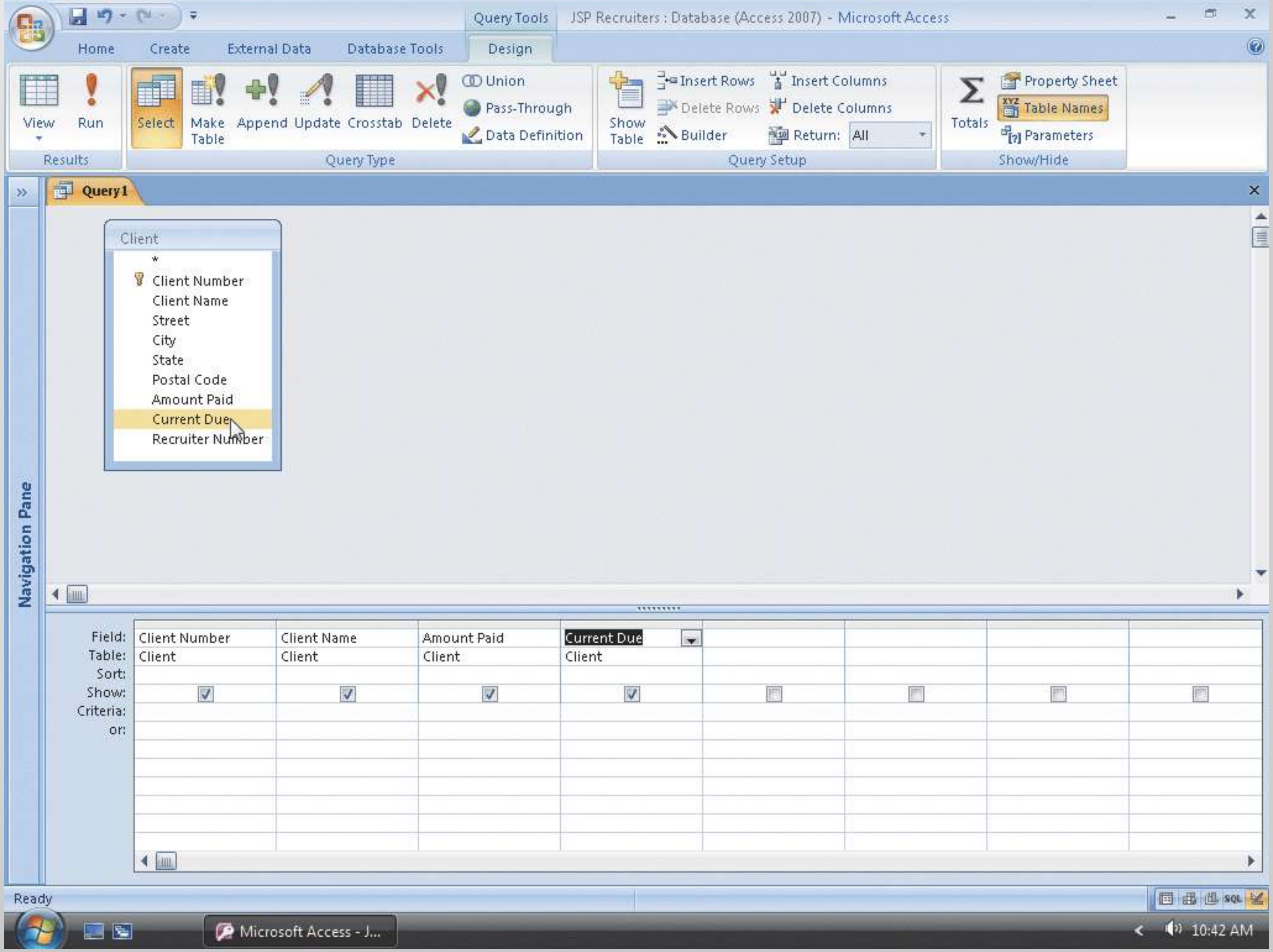
Creating a Query in Design View



Adding Fields to the Design Grid

- Double-click the Client Number field in the field list to add the Client Number field to the query
- Double-click the Client Name field in the field list to add the Client Name field to the query
- Add the Amount Paid field to the query by double-clicking the Amount Paid field in the field list
- Add the Current Due field to the query

Adding Fields to the Design Grid



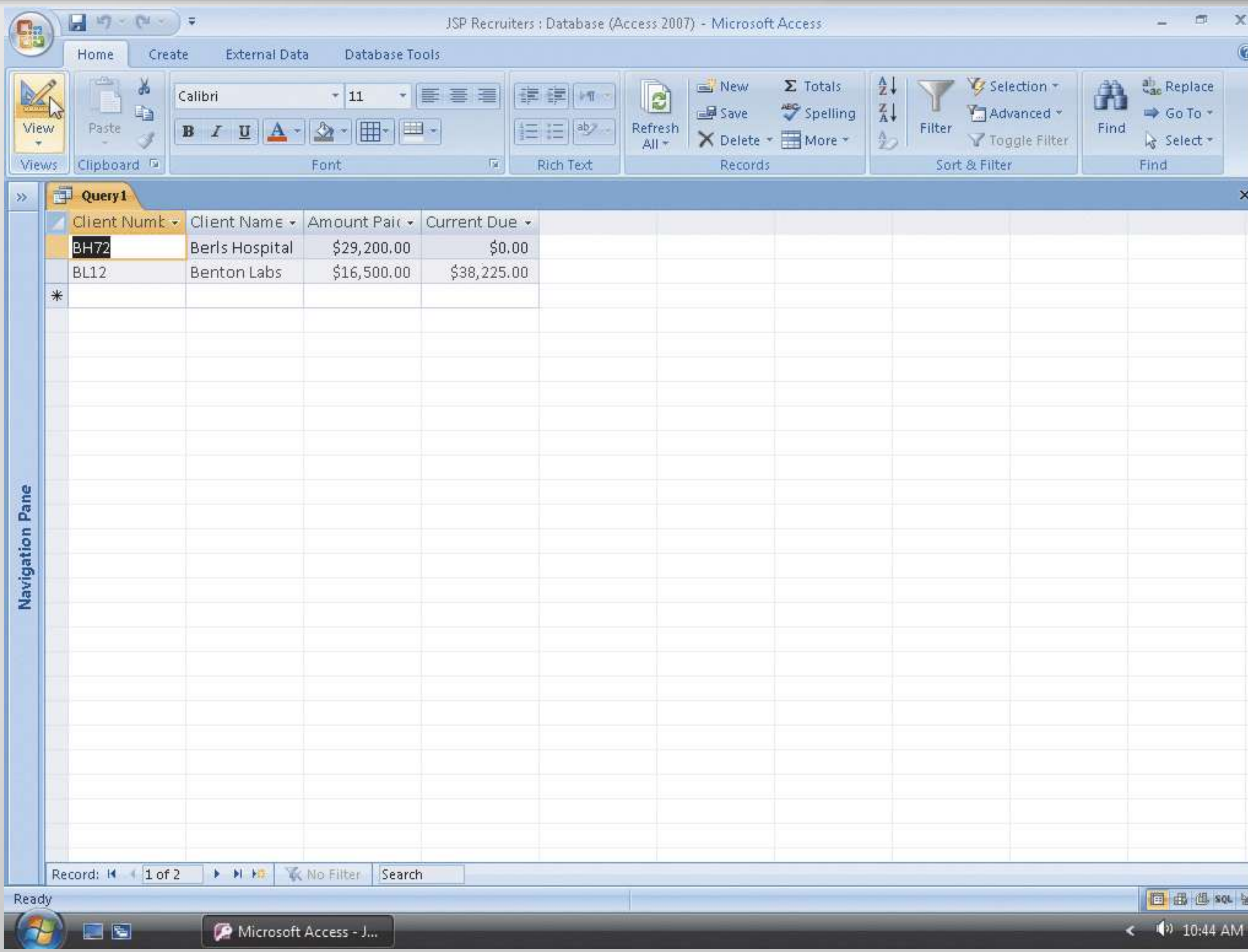
Using Text Data in a Criterion

- Click the Criteria row for the Client Number field to produce an insertion point
- Type `FD89` as the criterion
- Click the View button to display the query results

Using a Wildcard

- Click the View button to return to Design view
- If necessary, click the Criteria row below the Client Number field to produce an insertion point
- Use the DELETE or BACKSPACE key as necessary to delete the current entry
- Click the Criteria row below the Client Name field to produce an insertion point
- Type `Be*` as the criterion
- View the query results by clicking the View button

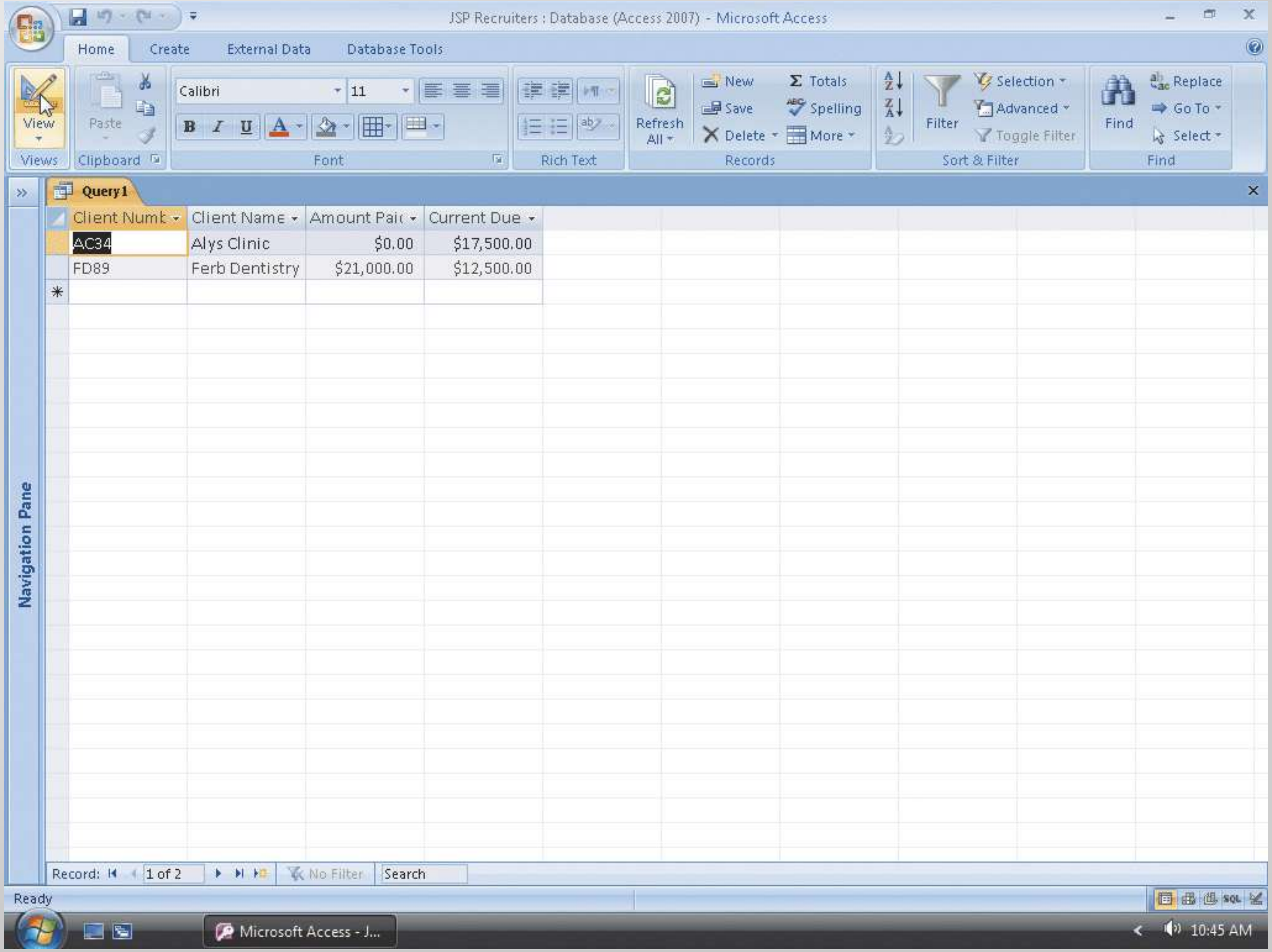
Using a Wildcard



Using Criteria for a Field Not Included in the Results

- Click the View button to return to Design view
- Erase the criterion in the Client Name field
- Include the City field in the query
- Type `Berridge` as the criterion for the City field
- Click the Show check box for the City field to remove the check mark
- View the query results

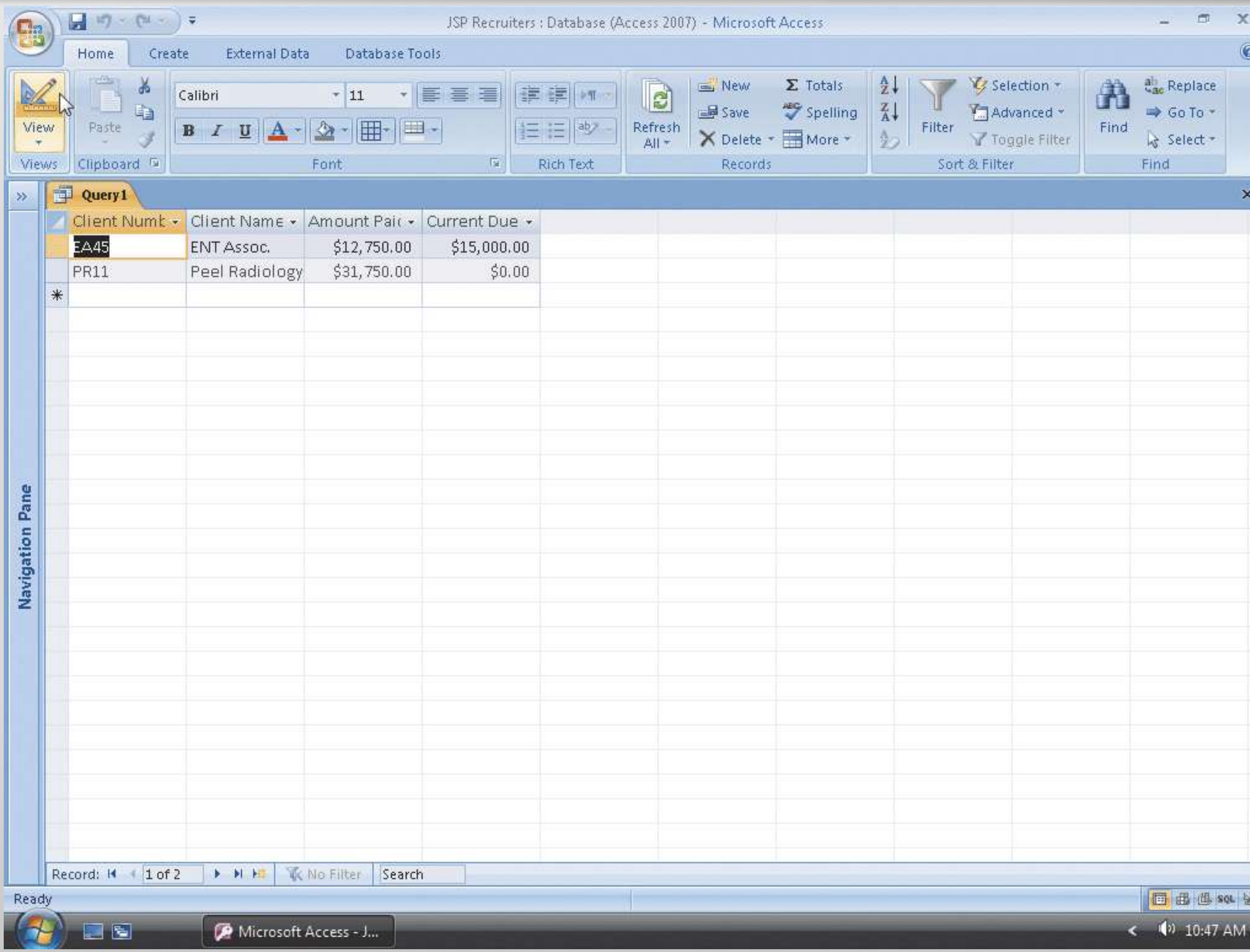
Using Criteria for a Field Not Included in the Results



Creating a Parameter Query

- Return to Design view
- Erase the current criterion in the City column, and then type `[Enter City]` as the new criterion
- Click the View button to display the Enter Parameter Value dialog box
- Type `Fort Stewart` as the parameter value in the Enter City text box and then click the OK button

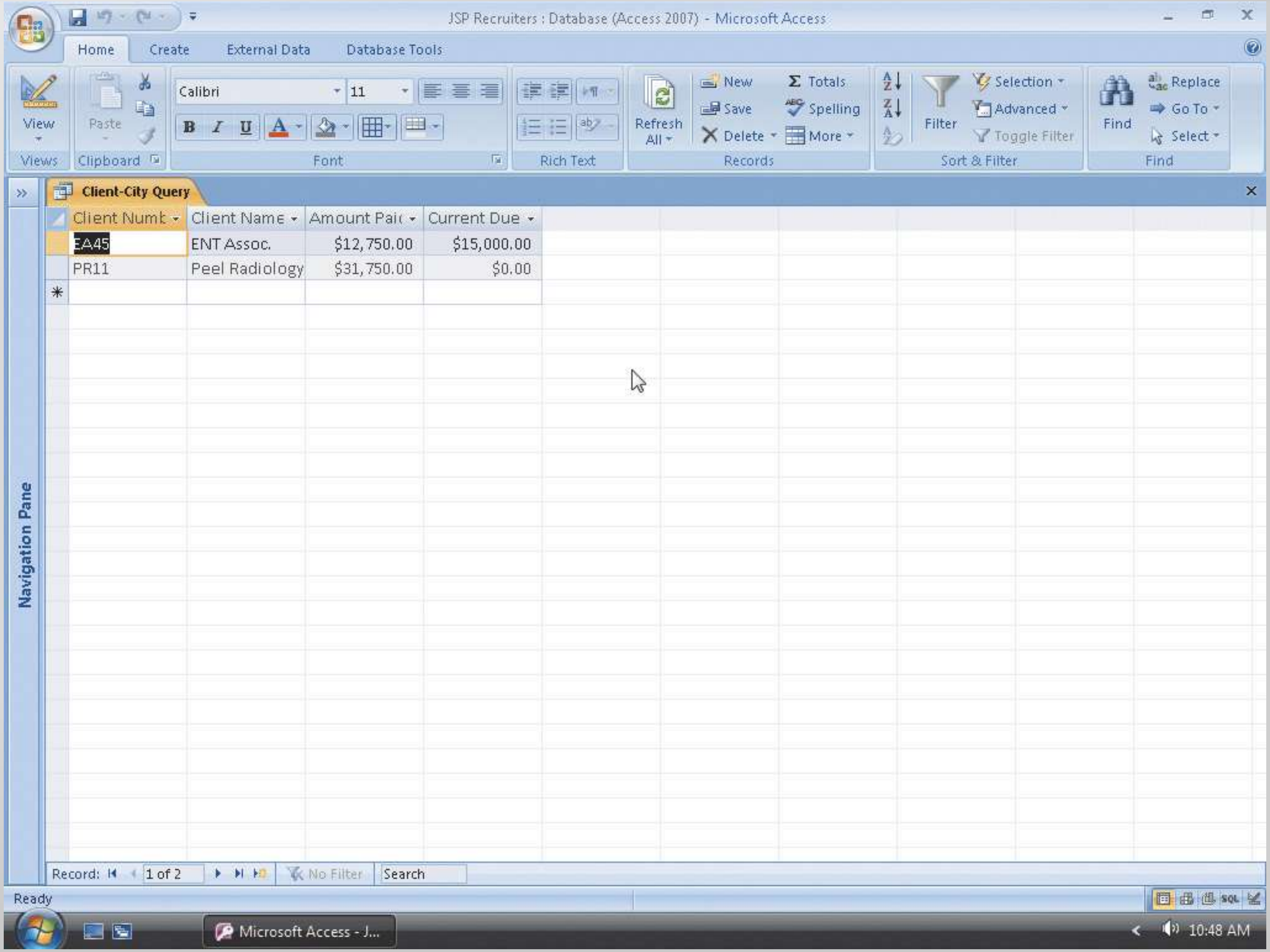
Creating a Parameter Query



Saving a Query

- Click the Save button on the Quick Access Toolbar to open the Save As dialog box
- Type `Client-City Query` in the Query Name text box
- Click the OK button to save the query
- Click the Close 'Client-City Query' button to close the query and remove it from the screen

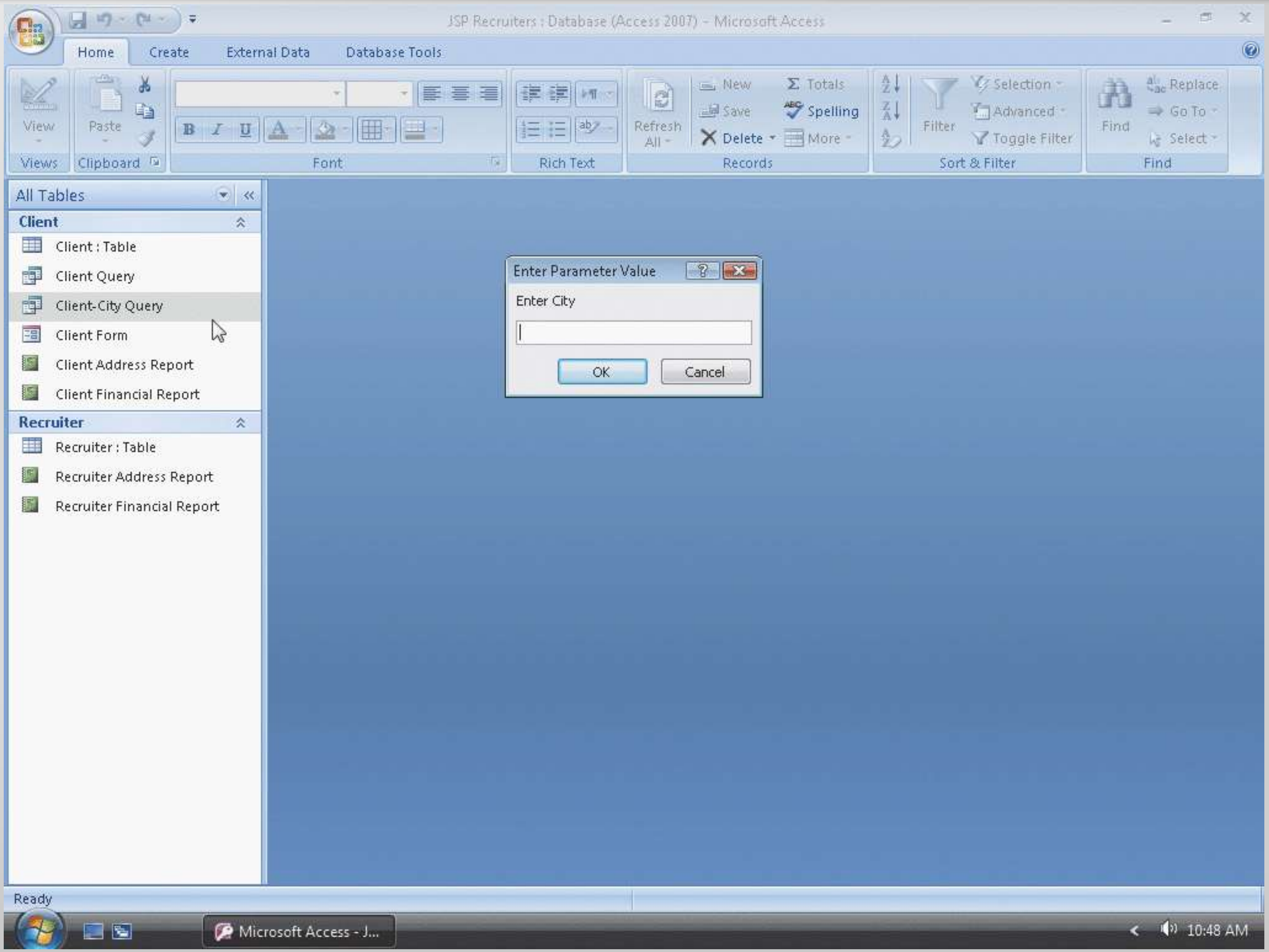
Saving a Query



Using a Saved Query

- Show the Navigation pane
- Right-click the Client-City Query to produce a shortcut menu
- Click Open on the shortcut menu to open the query and display the Enter Parameter Value dialog box
- Type `Fort Stewart` in the Enter City text box, and then click the OK button to display the results using Fort Stewart as the city as shown in Figure 2–24 on the previous slide
- Click the Close ‘Client-City Query’ button, shown in Figure 2–24, to close the query

Using a Saved Query



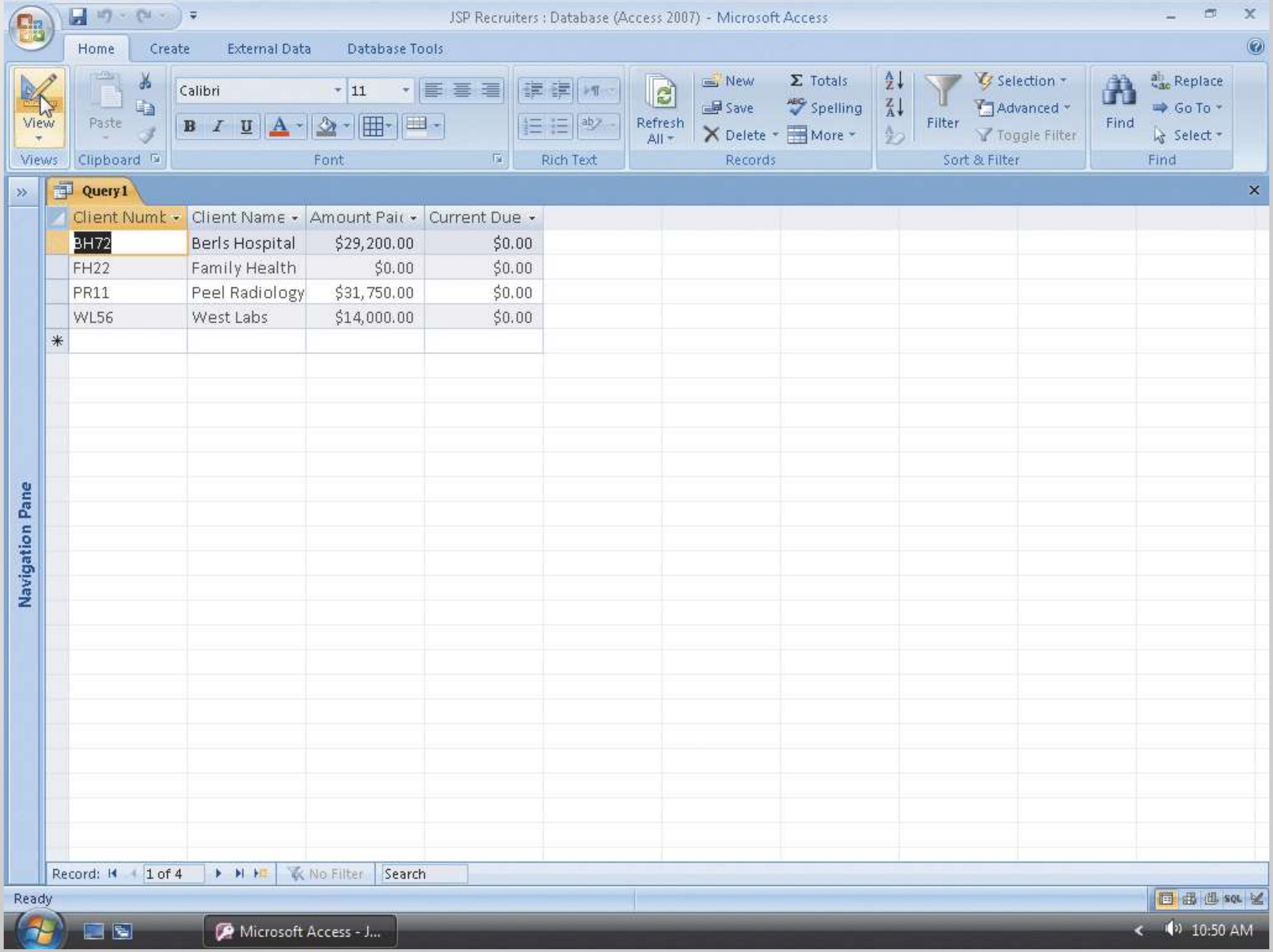
Using a Number in a Criterion

- Hide the Navigation pane
- Click Create on the Ribbon to display the Create tab
- Click the Query Design button to create a new query
- With the Client table selected, click the Add button in the Show Table dialog box to add the Client table to the query
- Click the Close button in the Show Table dialog box to remove the dialog box from the screen

Using a Number in a Criterion

- Drag the lower edge of the field box down far enough so all fields in the Client table are displayed
- Include the Client Number, Client Name, Amount Paid, and Current Due fields in the query
- Type 0 as the criterion for the Current Due field
- View the query results

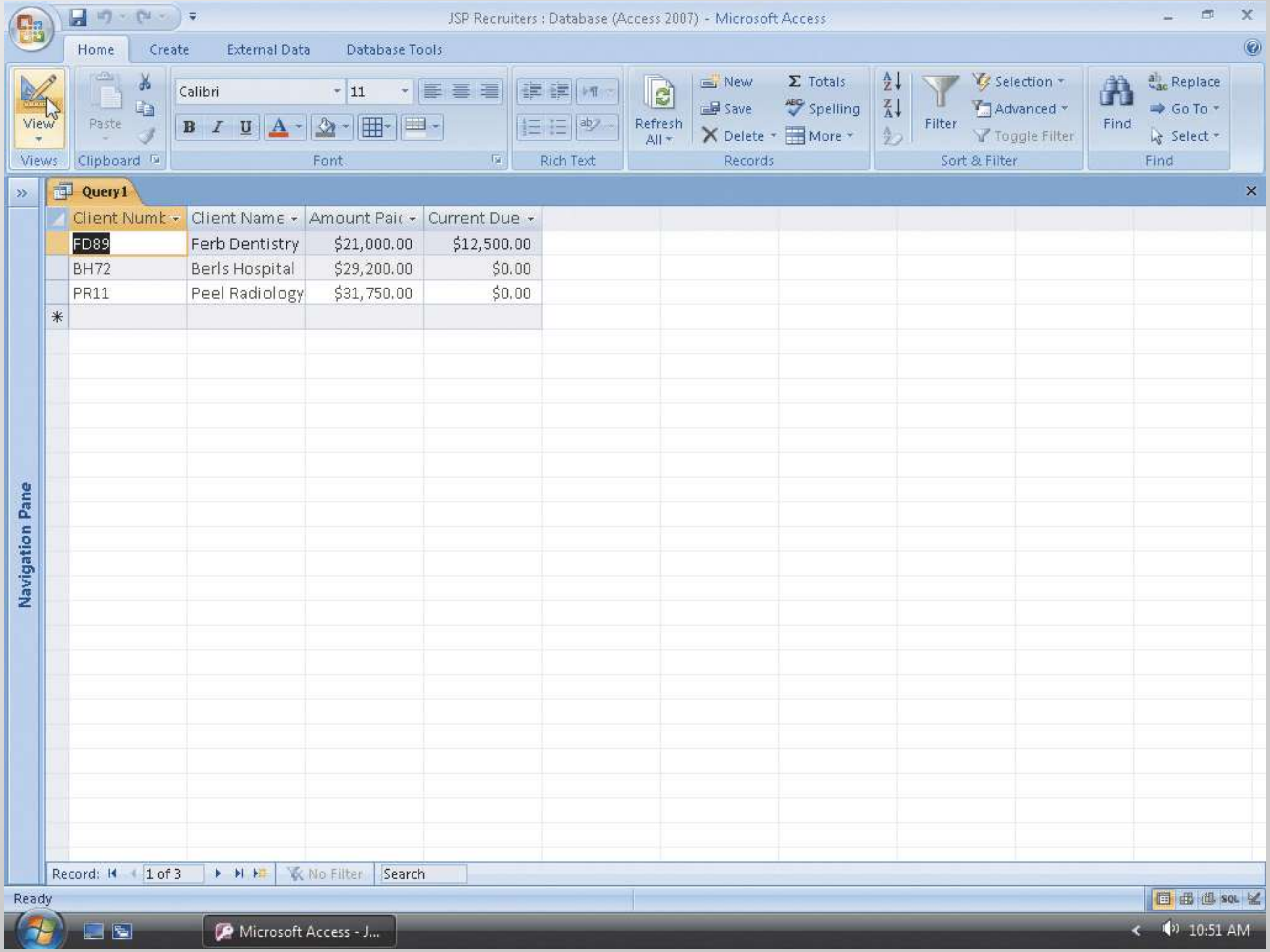
Using a Number in a Criterion



Using a Comparison Operator in a Criterion

- Return to Design view
- Erase the 0 in the Current Due column
- Type `>20000` as the criterion for the Amount Paid field
- View the query results

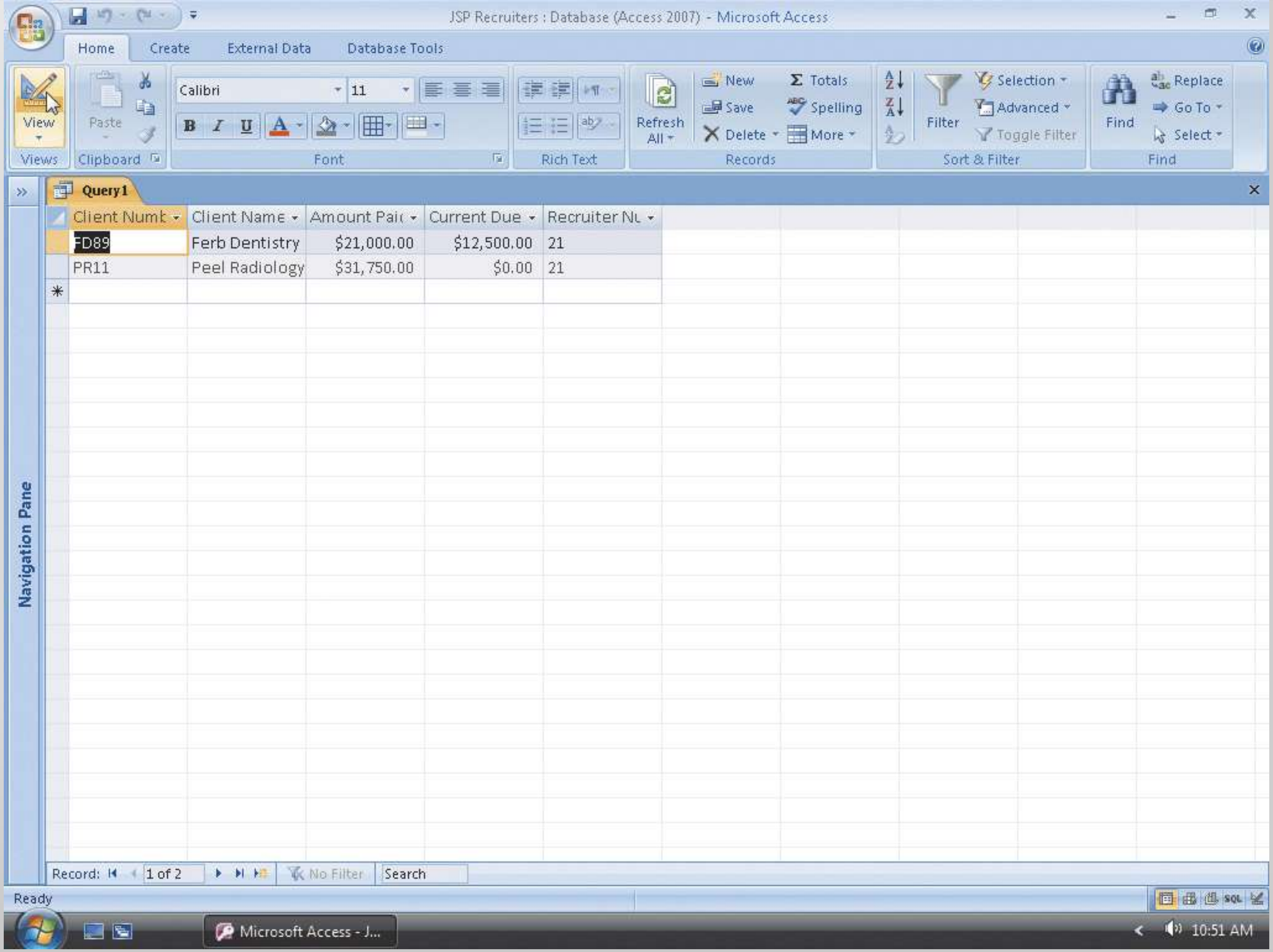
Using a Comparison Operator in a Criterion



Using a Compound Criterion Involving AND

- Return to Design view
- Include the Recruiter Number field in the query
- Type `21` as the criterion for the Recruiter Number field
- View the query results

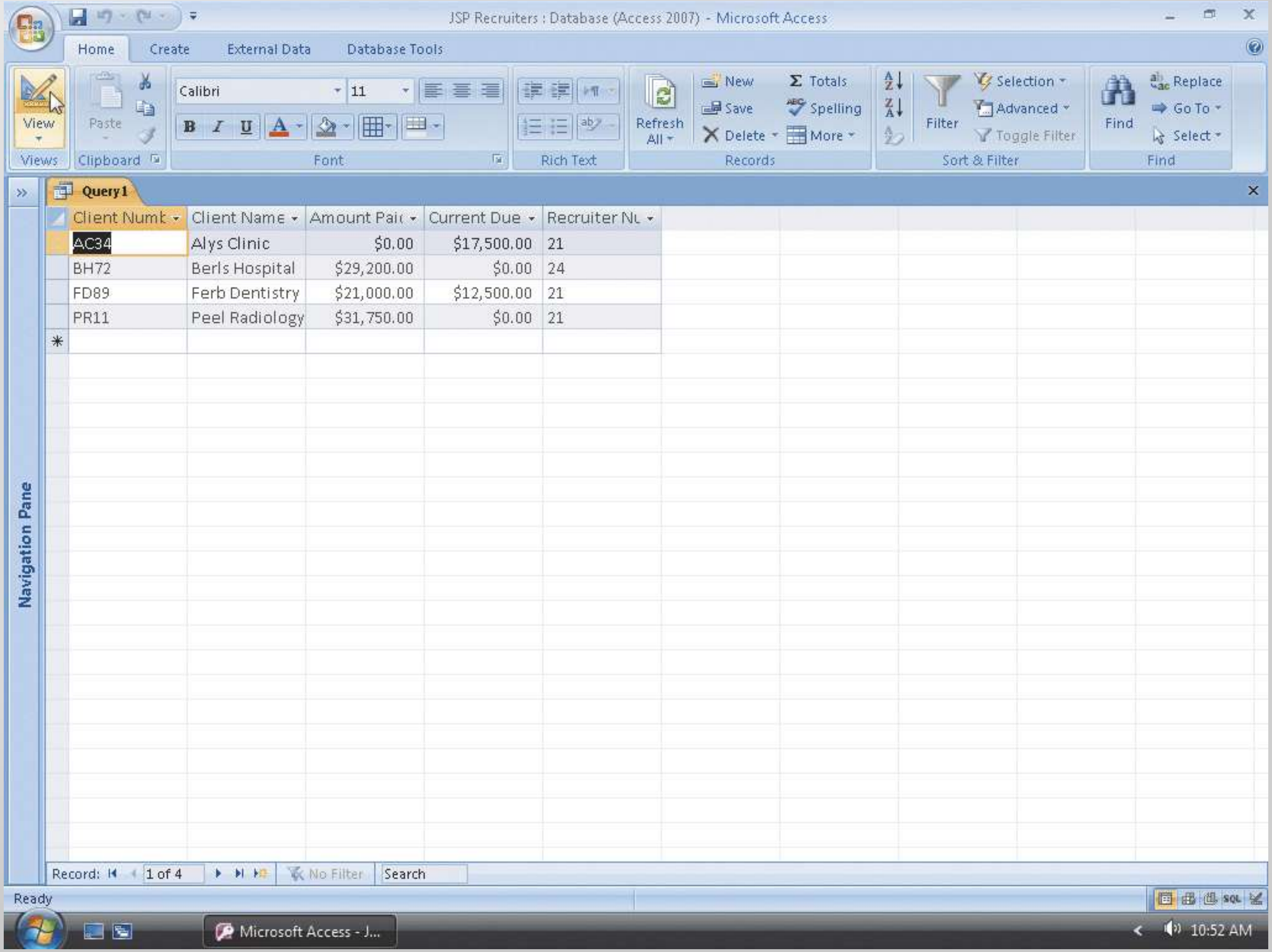
Using a Compound Criterion Involving AND



Using a Compound Criterion Involving OR

- Return to Design view
- If necessary, click the Criteria entry for the Recruiter Number field and then use the BACKSPACE key or the DELETE key to erase the entry ("21")
- Click the or: row (the row below the Criteria row) for the Recruiter Number field and then type `21` as the entry
- View the query results

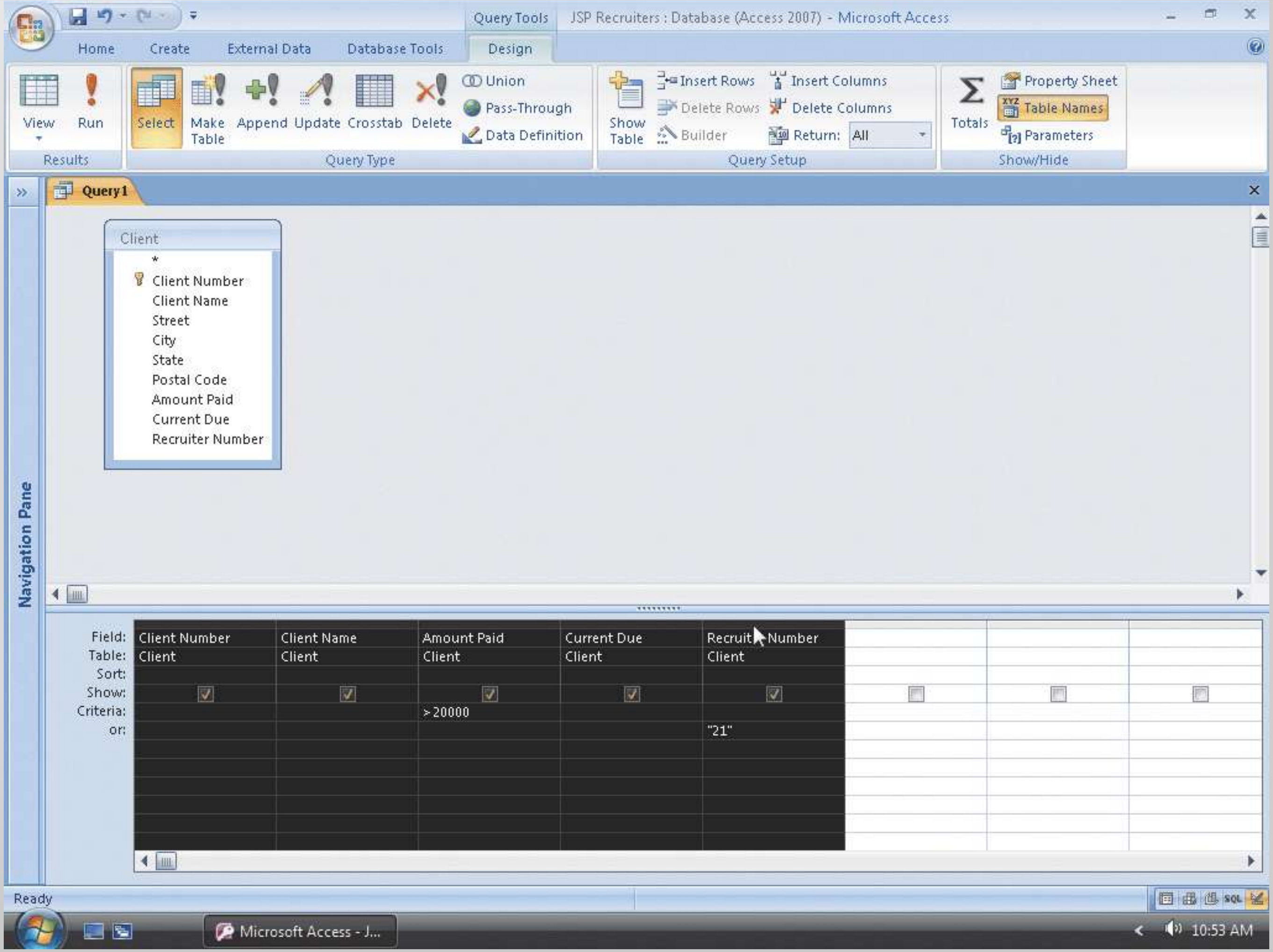
Using a Compound Criterion Involving OR



Clearing the Design Grid

- Return to Design view
- Click just above the Client Number column heading in the grid to select the column
- Hold the SHIFT key down and click just above the Recruiter Number column heading to select all the columns
- Press the DELETE key to clear the design grid

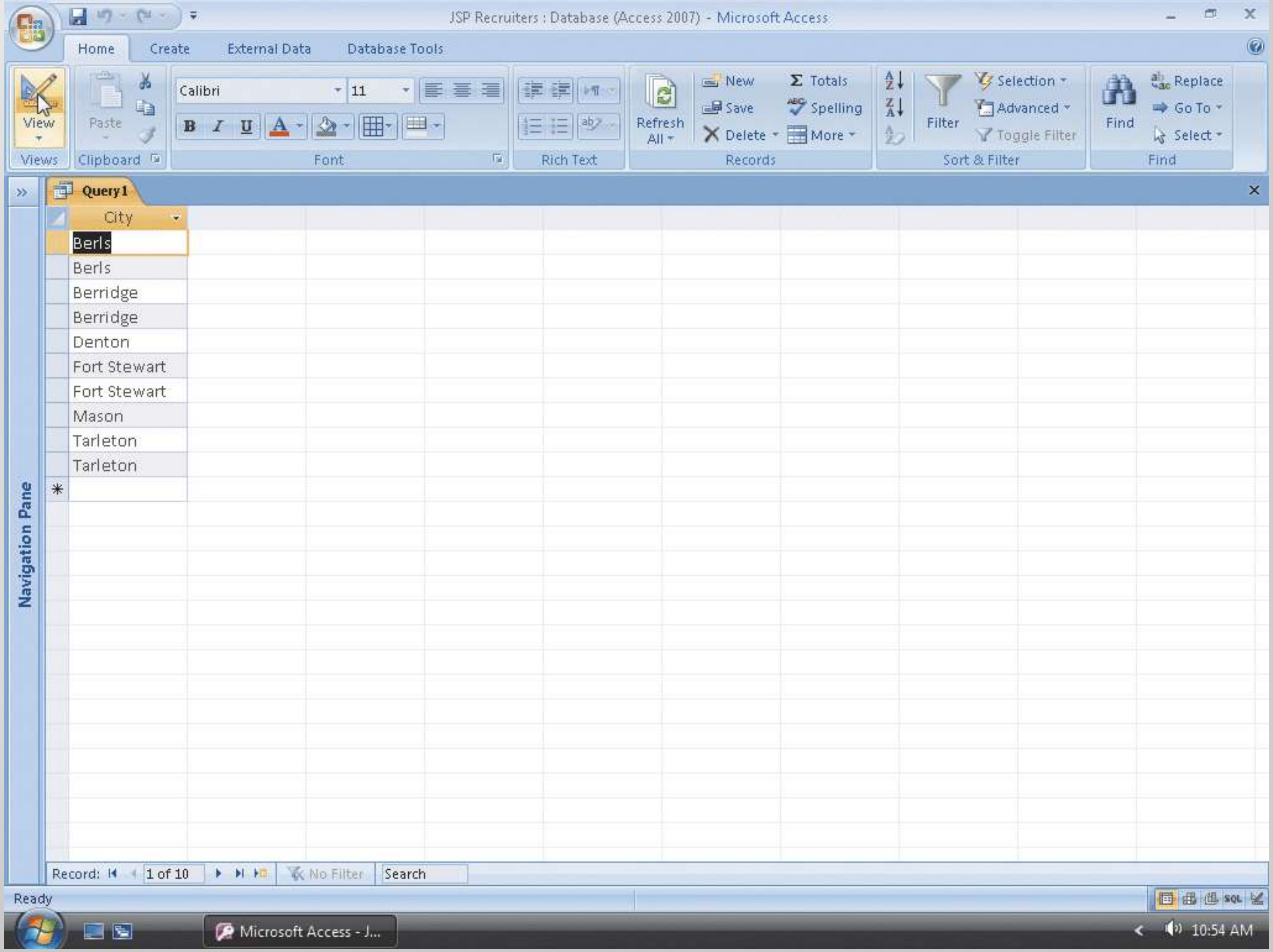
Clearing the Design Grid



Sorting Data in a Query

- Include the City field in the design grid
- Click the Sort row below the City field, and then click the Sort row arrow to display a menu of possible sort orders
- Click Ascending to select Ascending sort order
- View the query results

Sorting Data in a Query



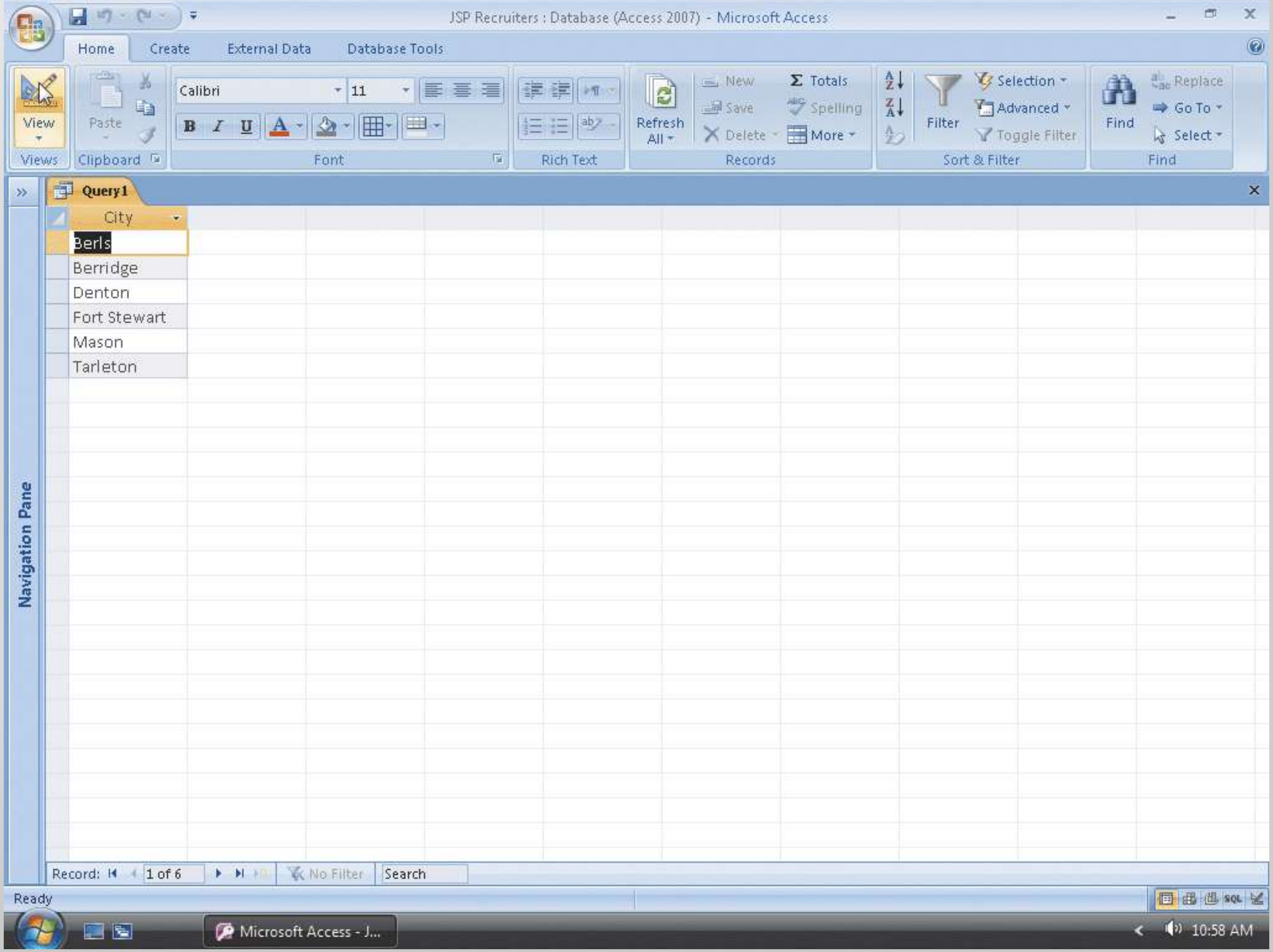
Omitting Duplicates

- Return to Design view
- Click the second field in the design grid (the empty field following City)
- If necessary, click Design on the Ribbon to display the Design tab
- Click the Property Sheet button on the Design tab to display the property sheet

Omitting Duplicates

- Click the Unique Values property box, and then click the arrow that appears to produce a menu of available choices for Unique Values
- Click Yes and then close the Query Properties sheet by clicking its Close button
- View the query results

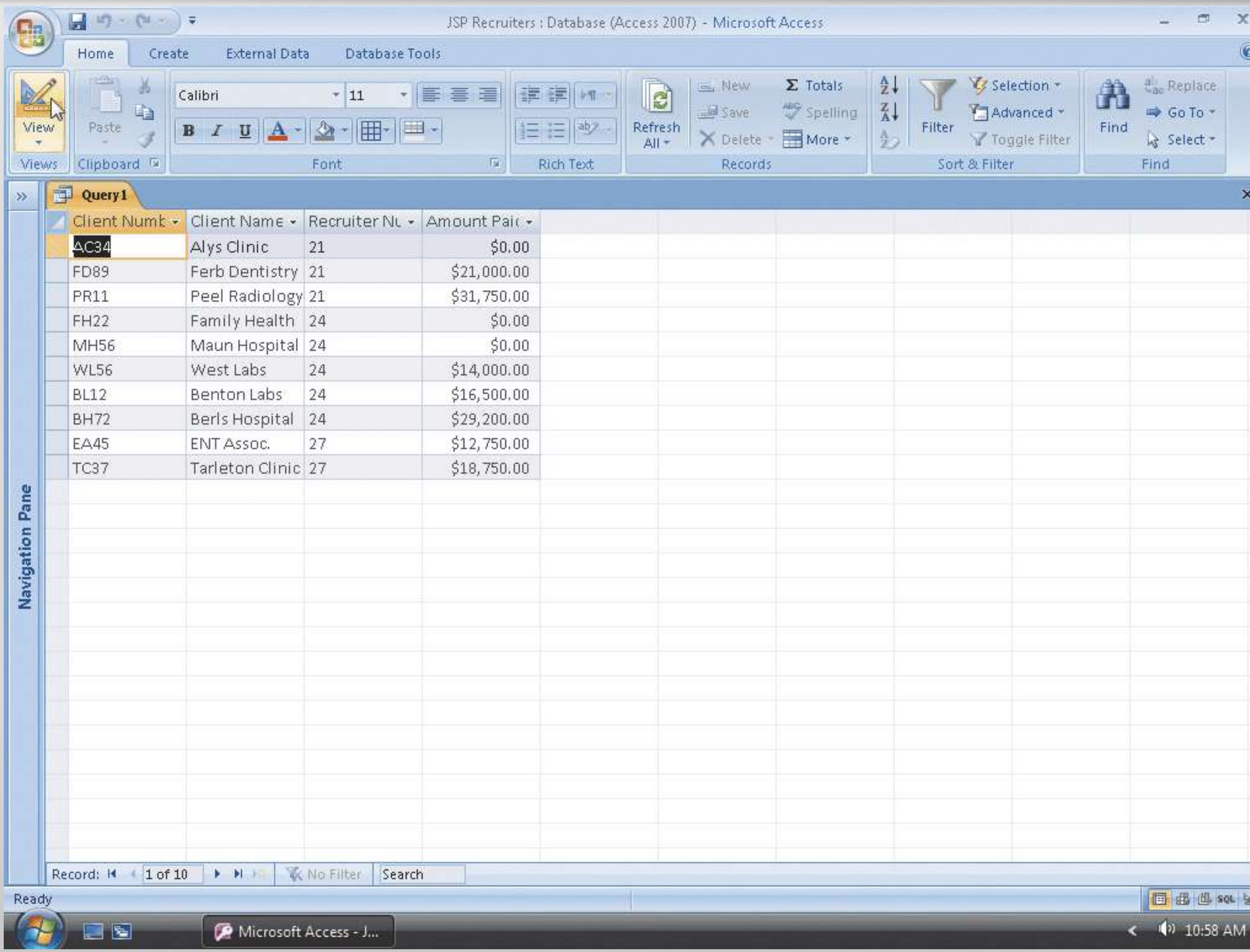
Omitting Duplicates



Sorting on Multiple Keys

- Return to Design view
- Clear the design grid
- Include the Client Number, Client Name, Recruiter Number, and Amount Paid fields in the query in this order
- Select Ascending as the sort order for both the Recruiter Number field and the Amount Paid field
- View the query results

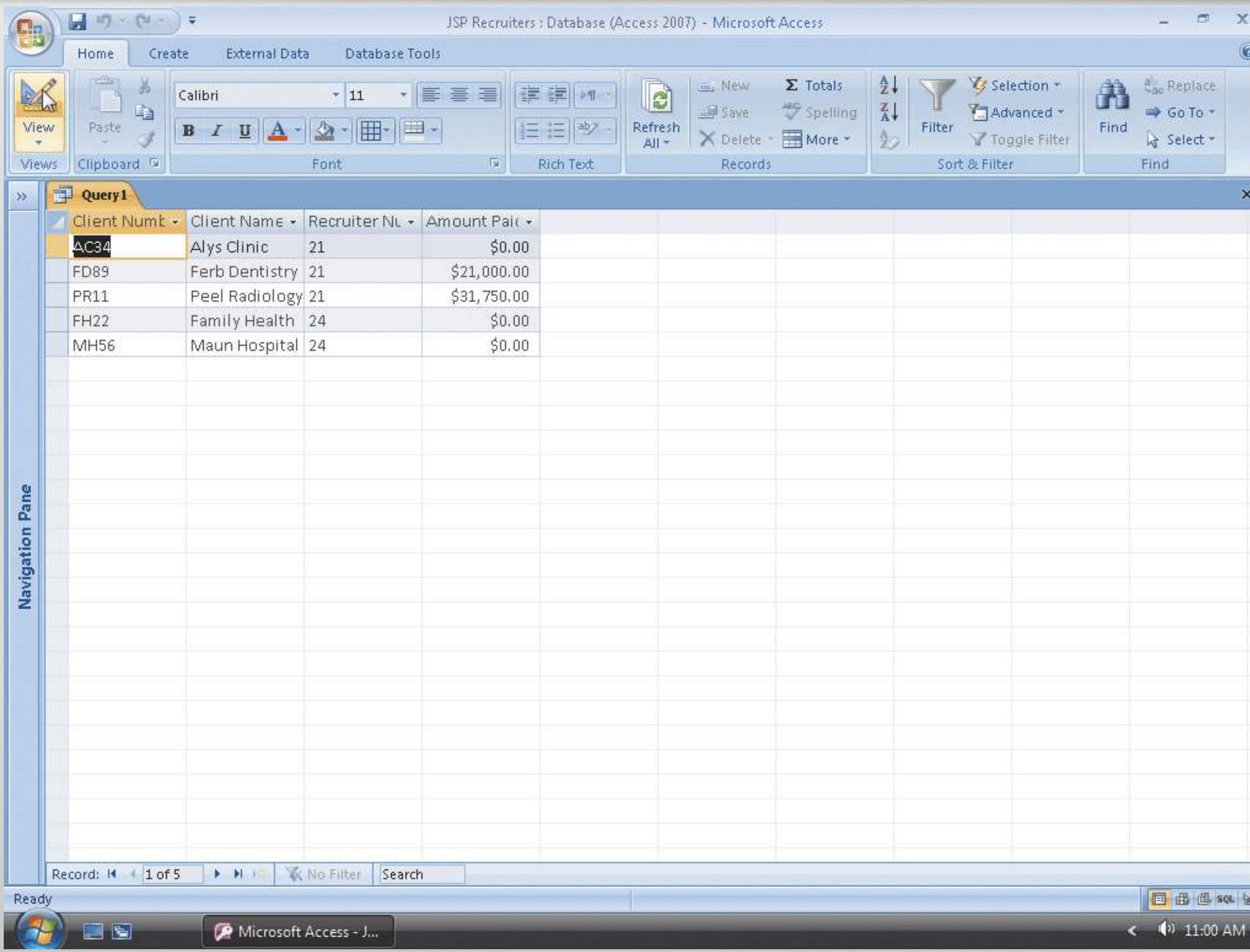
Sorting on Multiple Keys



Creating a Top-Values Query

- Return to Design view
- If necessary, click Design on the Ribbon to display the Design tab
- Click the Return box arrow on the Design tab to display the Return box menu
- Click 5 in the Return box menu to specify that the query results should contain the first five rows
- View the query results
- Close the query by clicking the Close ‘Query1’ button
- When asked if you want to save your changes, click the No button

Creating a Top-Values Query



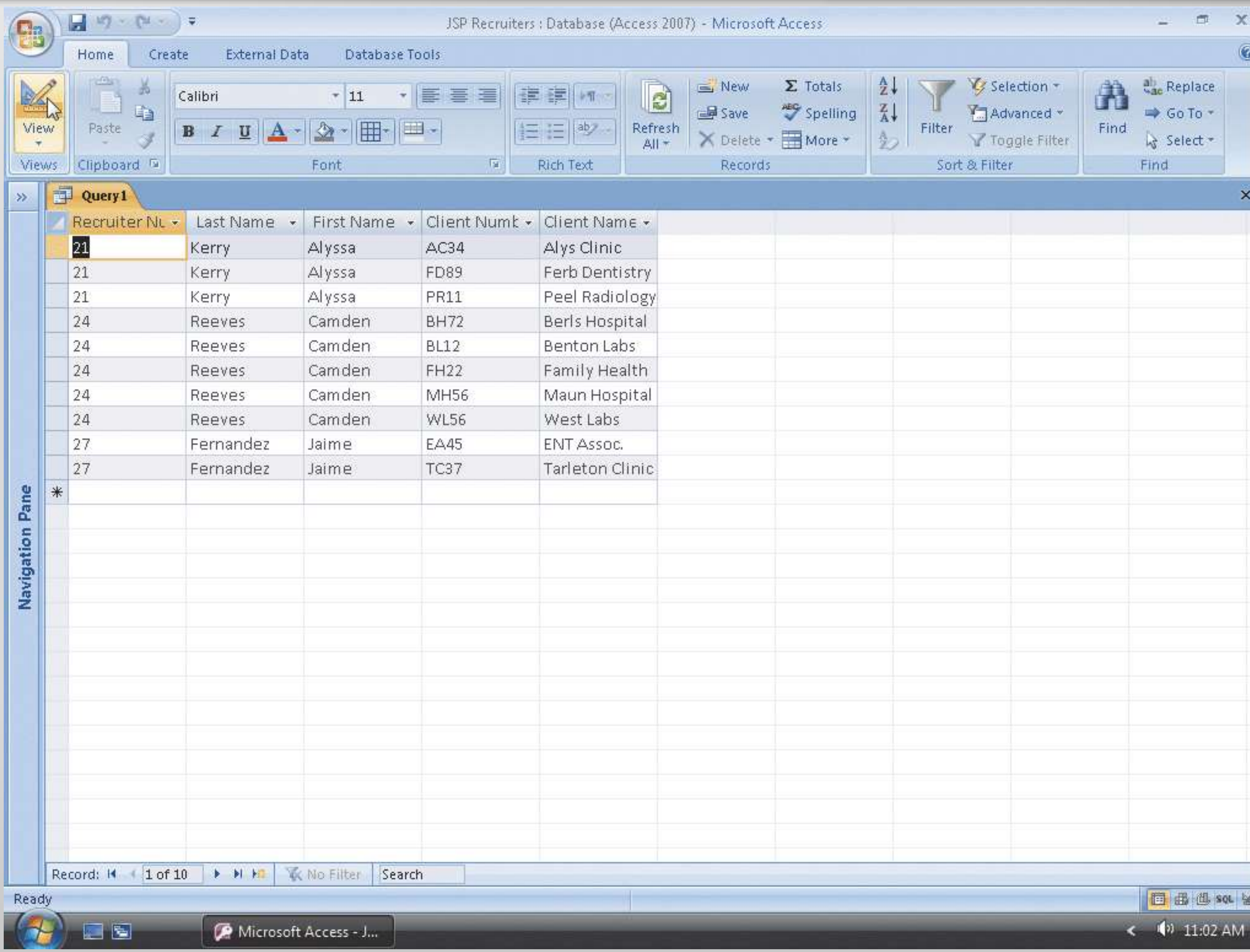
Joining Tables

- Click Create on the Ribbon to display the Create tab
- Click the Query Design button to create a new query
- Click the Recruiter table in the Show Table dialog box to select the table
- Click the Add button to add a field list for the Recruiter table to the query
- Click the Client table in the Show Table dialog box
- Click the Add button to add a field list for the Client table

Joining Tables

- Close the Show Table dialog box by clicking the Close button
- Expand the size of the field lists so all the fields in the Recruiter and Client tables appear
- In the design grid, include the Recruiter Number, Last Name, and First Name fields from the Recruiter table as well as the Client Number and Client Name fields from the Client table
- Select Ascending as the sort order for both the Recruiter Number field and the Client Number field
- View the query results

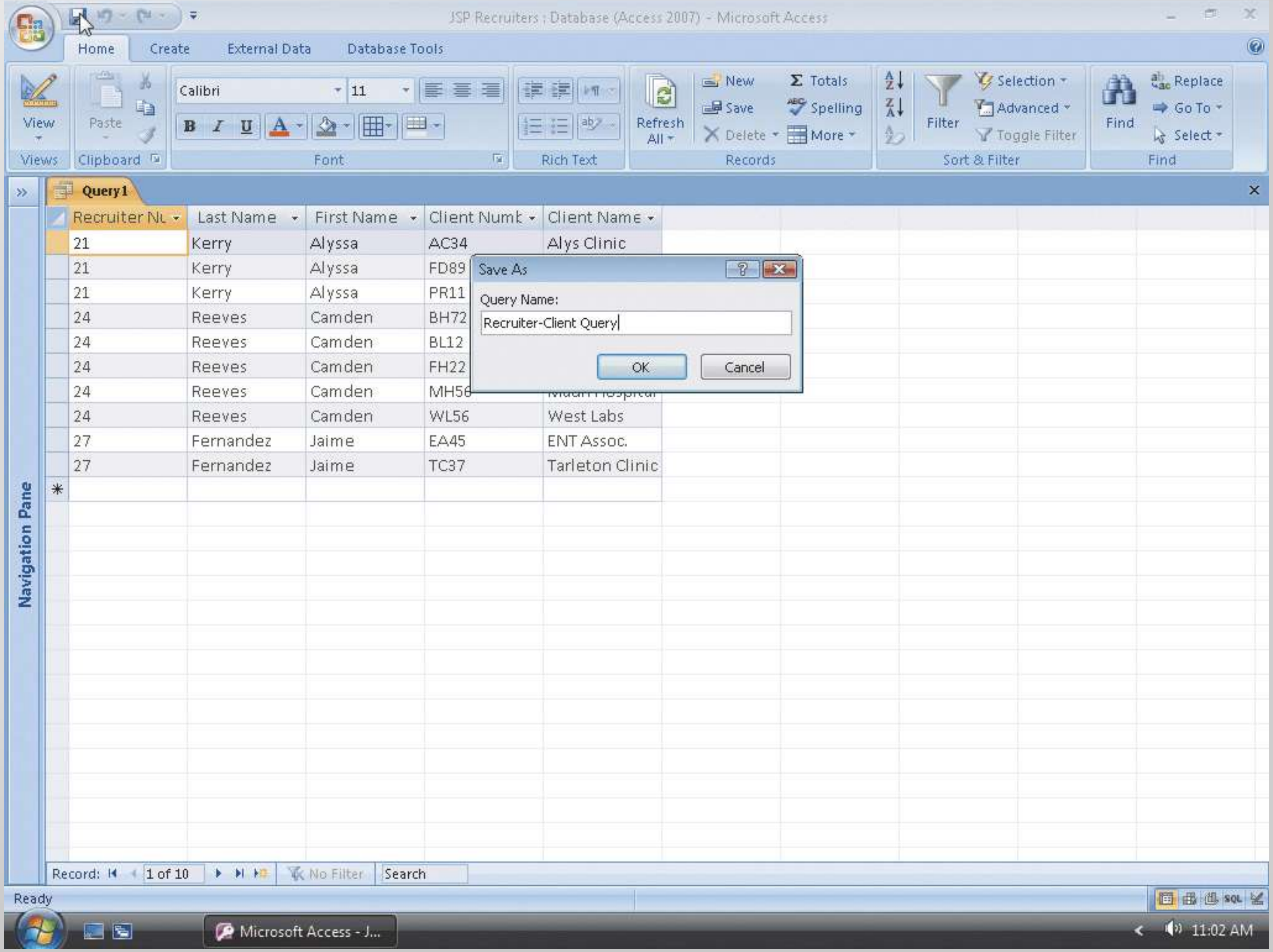
Joining Tables



Saving the Query

- Click the Save button on the Quick Access Toolbar to display the Save As dialog box
- Type `Recruiter-Client Query` as the query name
- Click the OK button to save the query

Saving the Query



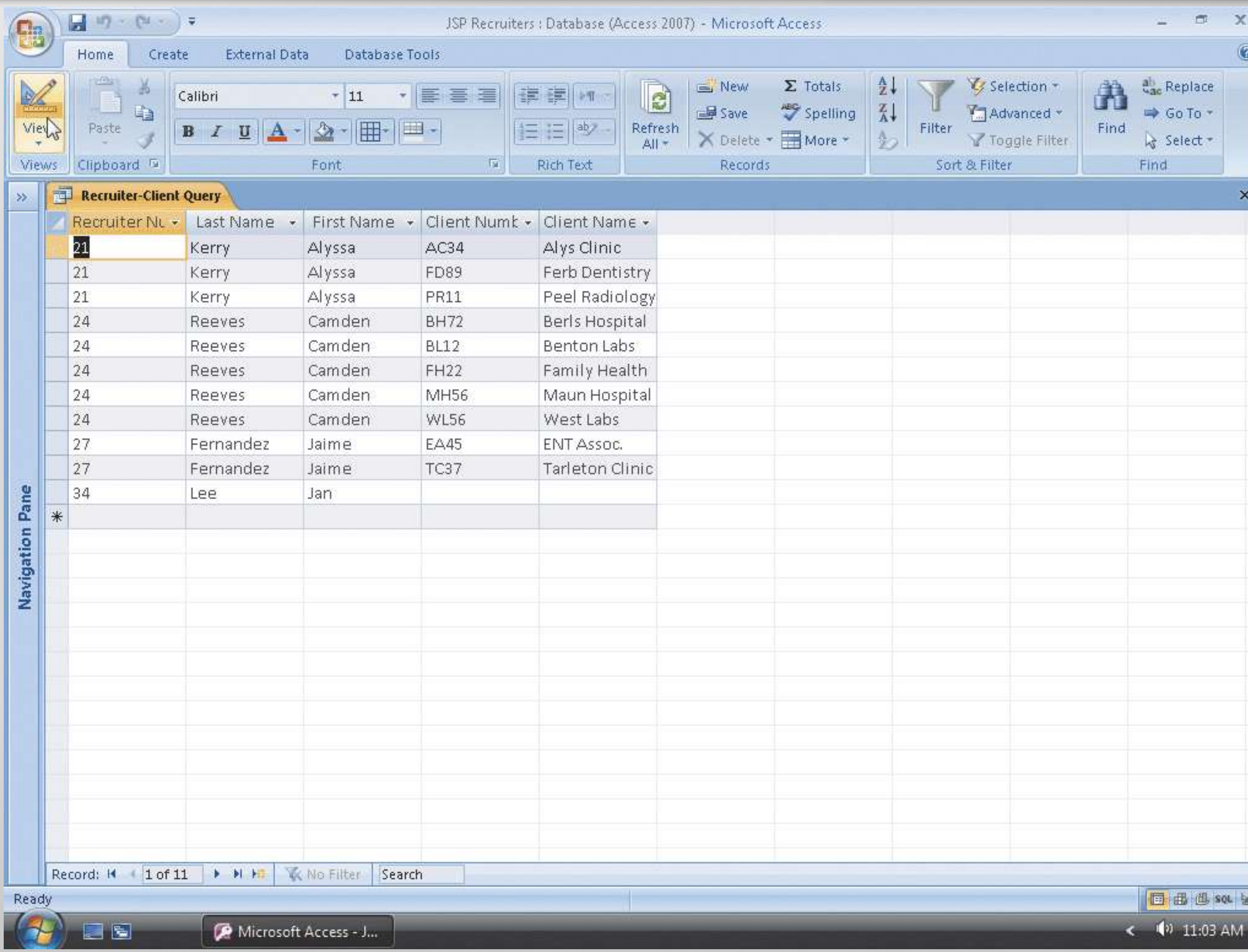
Changing Join Properties

- Return to Design view
- Right-click the join line to produce a shortcut menu
- Click Join Properties on the shortcut menu to display the Join Properties dialog box
- Click option button 2 to include all records from the Recruiter table regardless of whether they match any clients

Changing Join Properties

- Click the OK button
- View the query results by clicking the View button
- Click the Save button on the Quick Access Toolbar
- Close the Recruiter-Client Query by clicking the Close ‘Recruiter-Client Query’ button

Changing Join Properties



Creating a Report Involving a Join

- Show the Navigation pane and be sure the Recruiter-Client Query is selected in the Navigation pane
- Click Create on the Ribbon to display the Create tab
- Click the Report Wizard button to display the Report Wizard dialog box
- Click the Add All Fields button to add all the fields in the Recruiter-Client Query
- Click the Next button to display the next Report Wizard screen

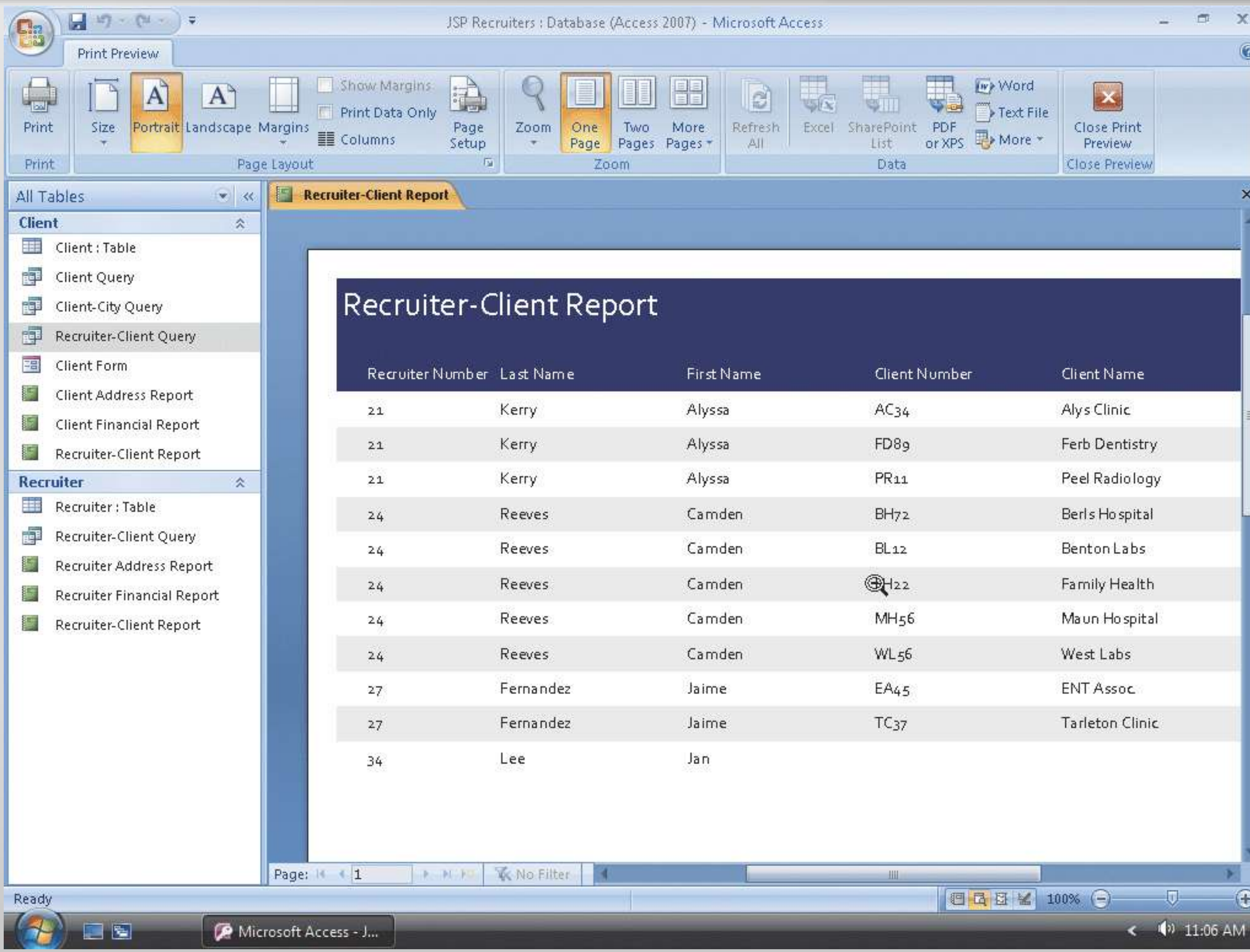
Creating a Report Involving a Join

- Because you will not specify any grouping, click the Next button in the Report Wizard dialog box to display the next Report Wizard screen
- Because you already specified the sort order in the query, click the Next button again to display the next Report Wizard screen
- Make sure that Tabular is selected as the Layout and Portrait is selected as the Orientation
- Click the Next button to display the next Report Wizard screen
- Be sure the Module style is selected

Creating a Report Involving a Join

- Click the Next button to display the next Report Wizard screen
- Erase the current title, and then type `Recruiter-Client Report` as the new title
- Click the Finish button to produce the report
- Click the Close button for the Recruiter-Client Report to remove the report from the screen

Creating a Report Involving a Join



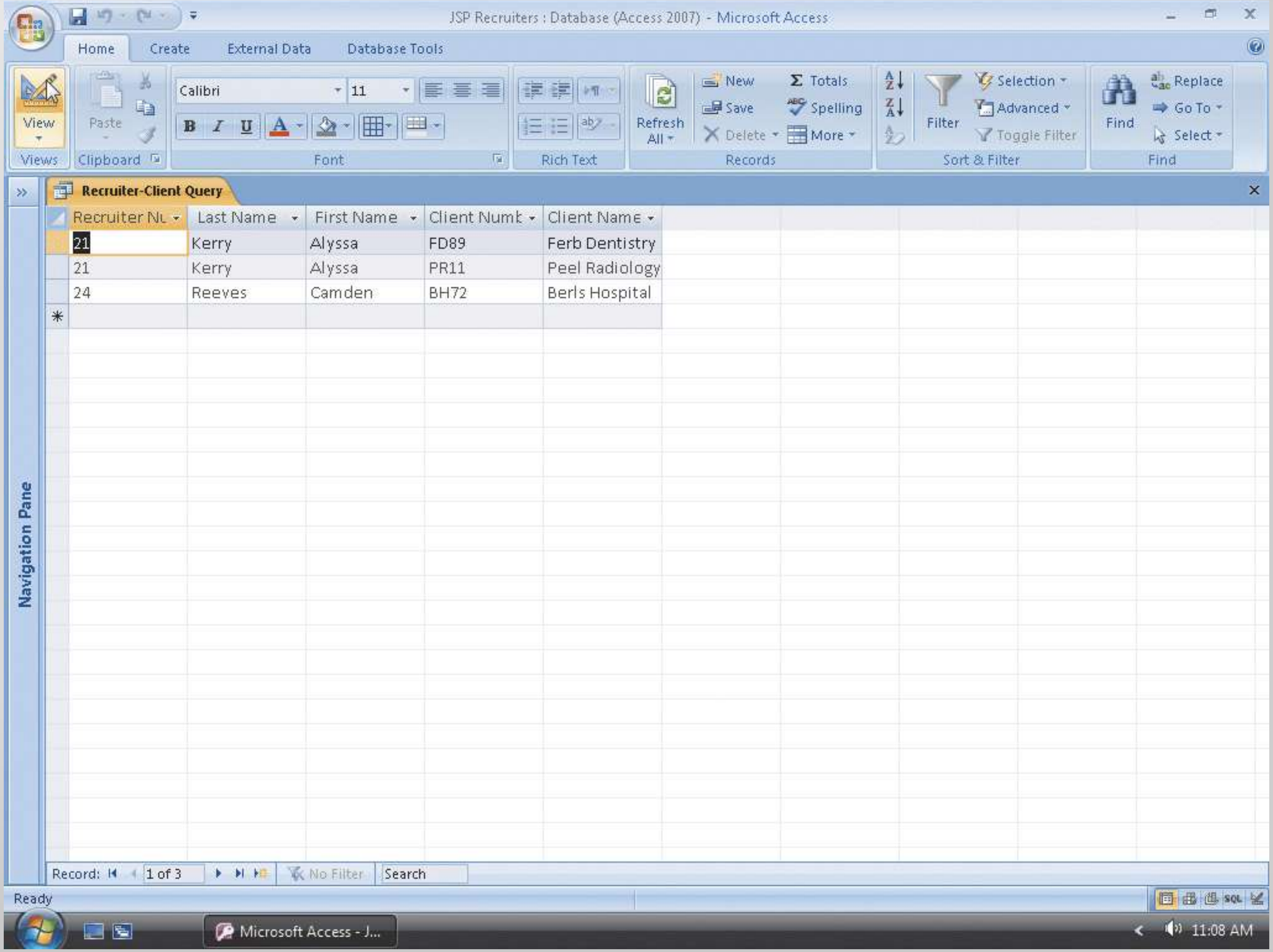
Printing a Report

- With the Recruiter-Client Report selected in the Navigation pane, click the Office Button, point to Print on the Office button menu, and then click Quick Print on the Print submenu to print the report

Restricting the Records in a Join

- Open the Recruiter-Client Query in Design view and hide the Navigation pane
- Add the Amount Paid field to the query
- Type >20000 as the criterion for the Amount Paid field and then click the Show check box for the Amount Paid field to remove the check mark
- View the query results
- Close the query by clicking the Close 'Recruiter-Client Query' button
- When asked if you want to save your changes, click the No button

Restricting the Records in a Join



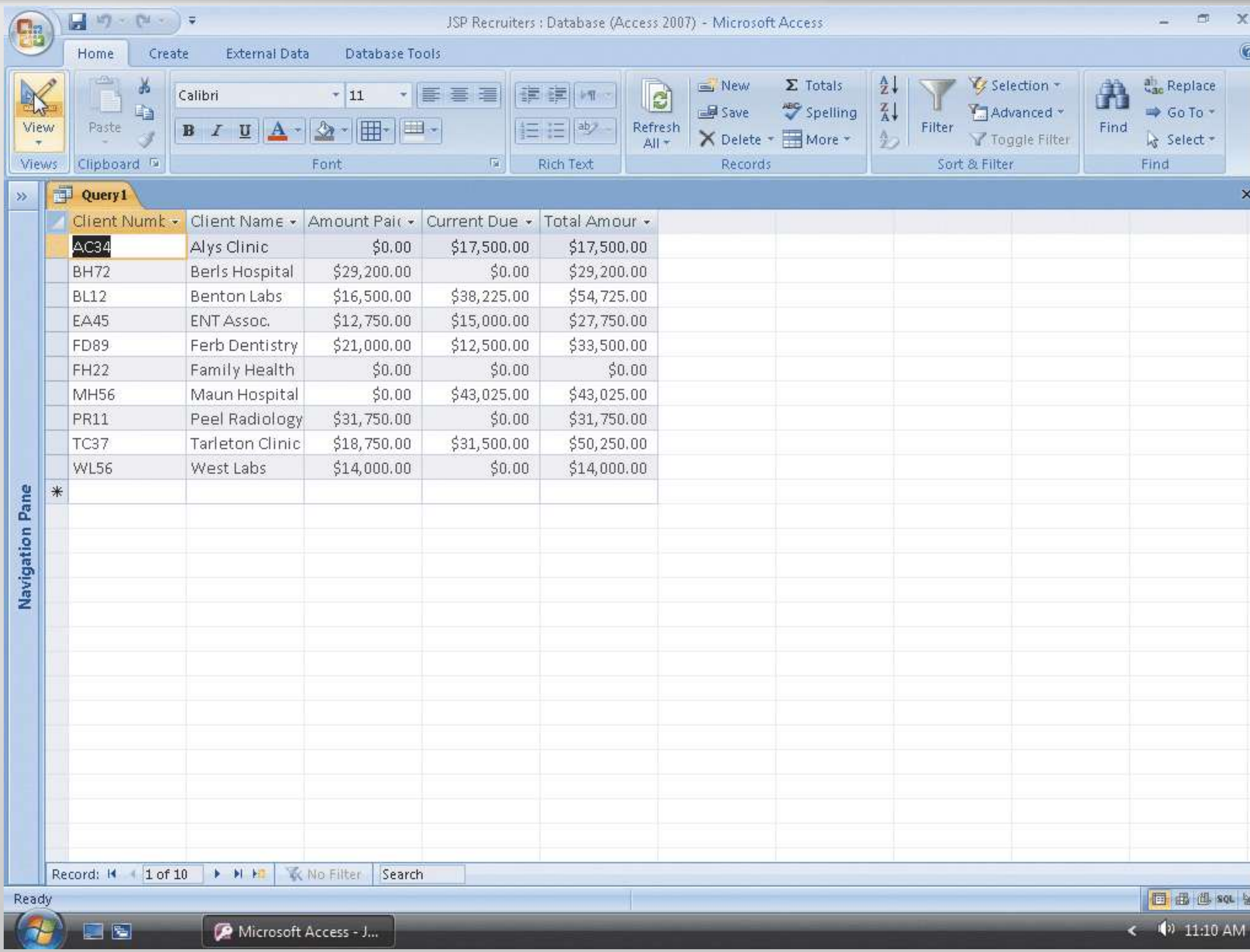
Using a Calculated Field in a Query

- Create a query with a field list for the Client table
- Add the Client Number, Client Name, Amount Paid, and Current Due fields to the query
- Right-click the Field row in the first open column in the design grid to display a shortcut menu
- Click Zoom on the shortcut menu to display the Zoom dialog box

Using a Calculated Field in a Query

- Type `Total Amount:[Amount Paid]+[Current Due]` in the Zoom dialog box
- Click the OK button to enter the expression
- View the query results

Using a Calculated Field in a Query



Client Numb	Client Name	Amount Paid	Current Due	Total Amour
AC34	Alys Clinic	$0.00	$17,500.00	$17,500.00
BH72	Berls Hospital	$29,200.00	$0.00	$29,200.00
BL12	Benton Labs	$16,500.00	$38,225.00	$54,725.00
EA45	ENT Assoc.	$12,750.00	$15,000.00	$27,750.00
FD89	Ferb Dentistry	$21,000.00	$12,500.00	$33,500.00
FH22	Family Health	$0.00	$0.00	$0.00
MH56	Maun Hospital	$0.00	$43,025.00	$43,025.00
PR11	Peel Radiology	$31,750.00	$0.00	$31,750.00
TC37	Tarleton Clinic	$18,750.00	$31,500.00	$50,250.00
WL56	West Labs	$14,000.00	$0.00	$14,000.00

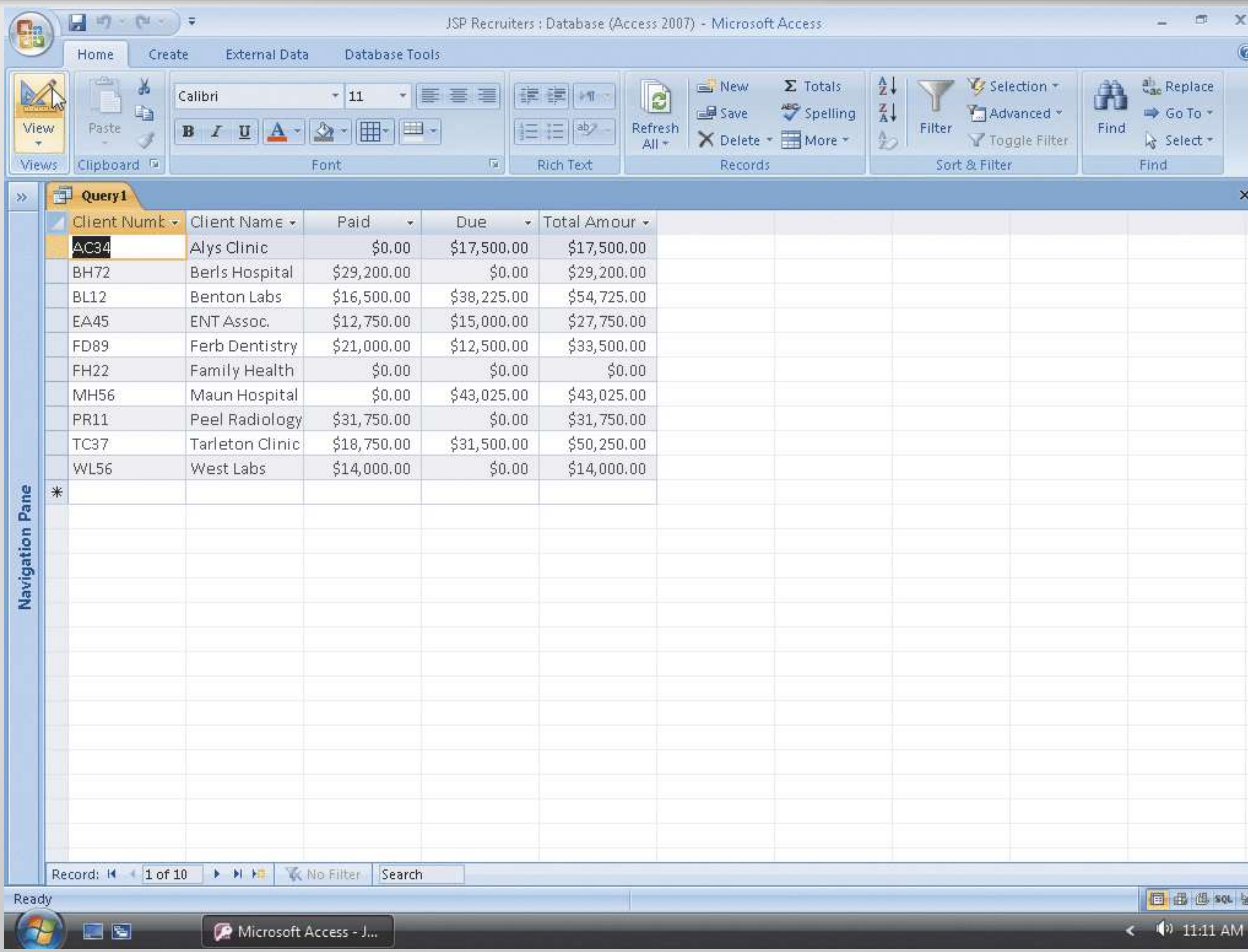
Changing a Caption

- Return to Design view
- Click Design on the Ribbon to display the Design tab
- Click the Amount Paid field in the design grid, and then click the Property Sheet button on the Design tab
- Click the Caption box, and then type `Paid` as the caption
- Close the property sheet by clicking its Close button
- Click the Current Due field in the design grid, and then click the Property Sheet button on the Design tab

Changing a Caption

- Click the Caption box, and then type Due as the caption
- Close the Property Sheet by clicking its Close button
- View the query results
- Click the Close ‘Query1’ button to close the query
- When asked if you want to save your changes, click the No button

Changing a Caption



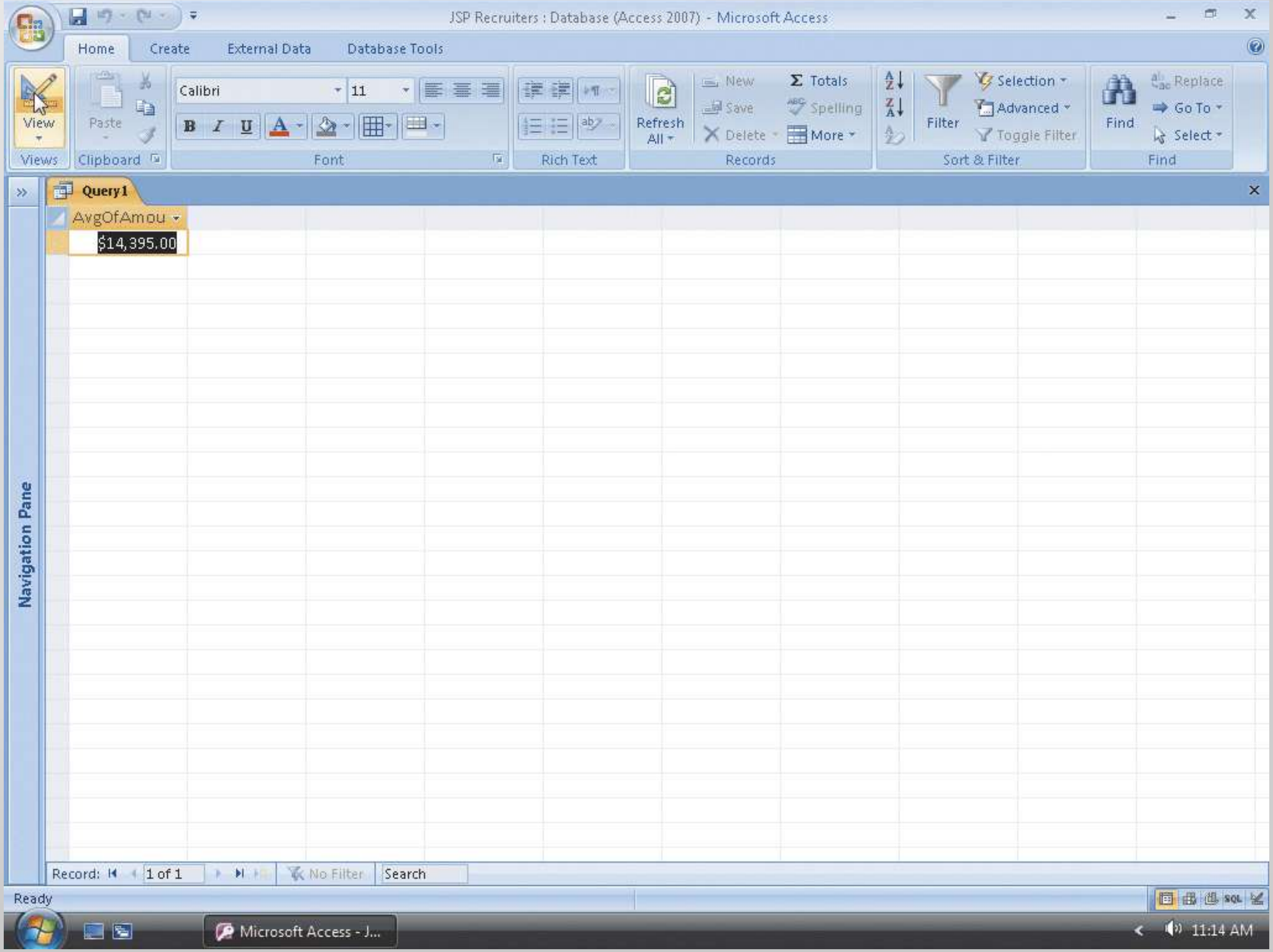
Calculating Statistics

- Create a new query with a field list for the Client table
- If necessary, click Design on the Ribbon to display the Design tab
- Add the Amount Paid field to the query
- Click the Totals button on the Design tab to include the Total row in the design grid

Calculating Statistics

- Click the Total row in the Amount Paid column to display the Total box arrow
- Click the Total box arrow to display the Total list
- Click Avg to indicate that Access is to calculate an average
- View the query

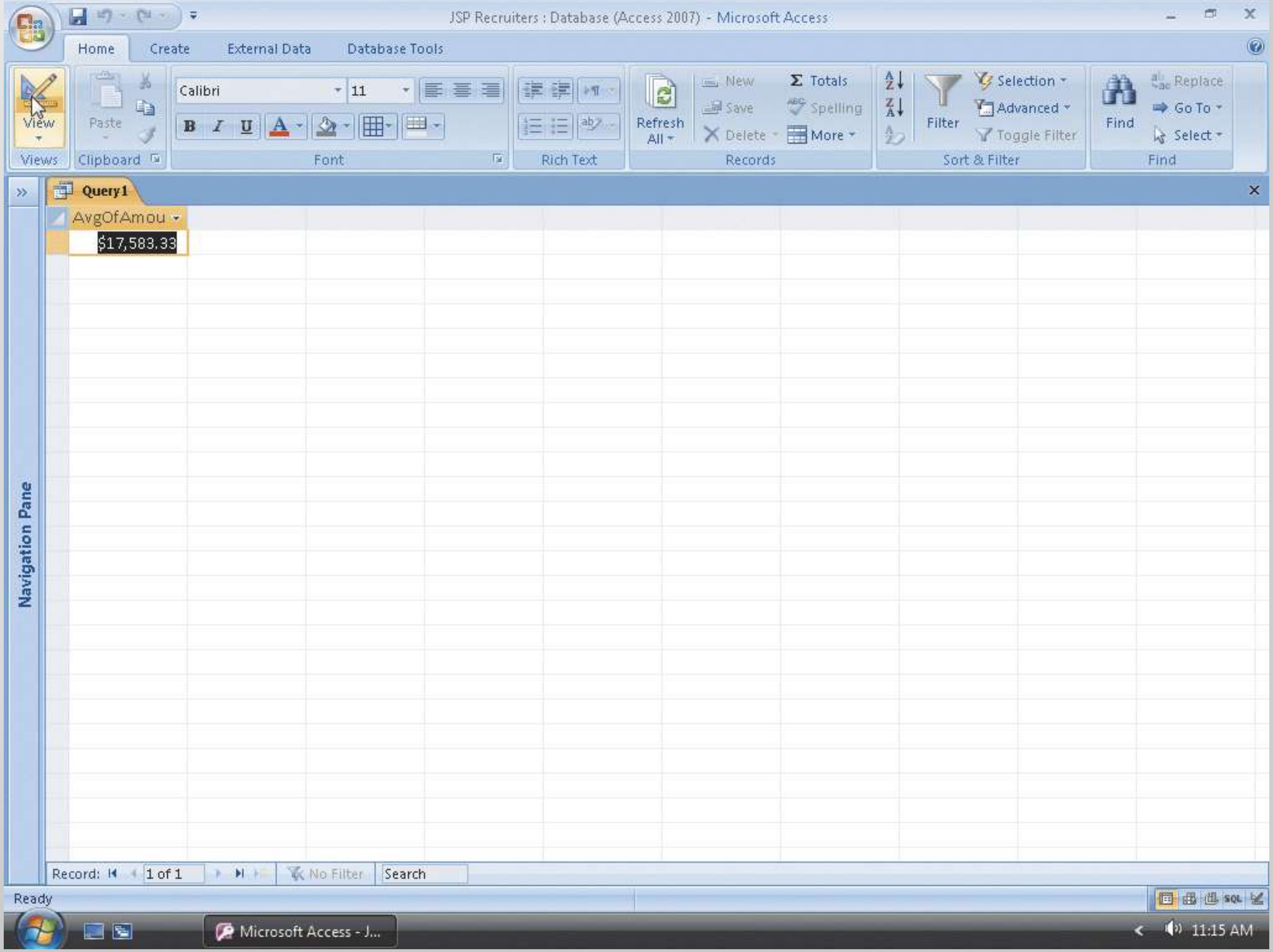
Calculating Statistics



Using Criteria in Calculating Statistics

- Return to Design view
- Include the Recruiter Number field in the design grid
- Click the Total box arrow in the Recruiter Number column to produce a Total list
- Click Where
- Type `21` as the criterion for the Recruiter Number field
- View the query results

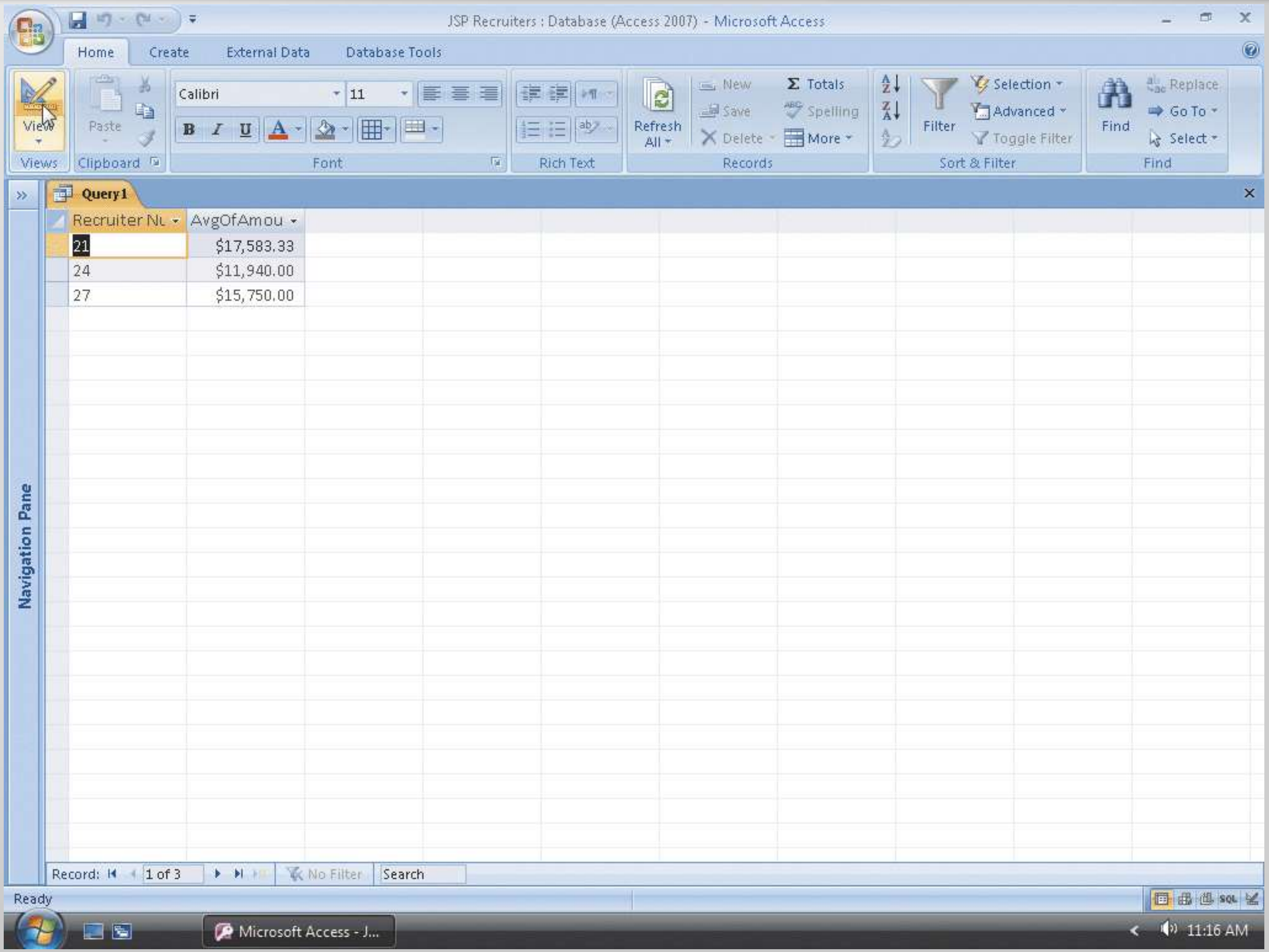
Using Criteria in Calculating Statistics



Using Grouping

- Return to Design view and clear the design grid
- Include the Recruiter Number field in the query
- Include the Amount Paid field in the query
- Select Avg as the calculation in the Total row for the Amount Paid field
- View the query results
- Close the query
- Do not save your changes

Using Grouping



Creating a Crosstab Query

- Click Create on the Ribbon to display the Create tab
- Click the Query Wizard button to display the New Query dialog box
- Click Crosstab Query Wizard in the New Query dialog box
- Click the OK button to display the Crosstab Query Wizard
- With the Tables option button selected and the Client table selected, click the Next button to display the next Crosstab Query Wizard screen

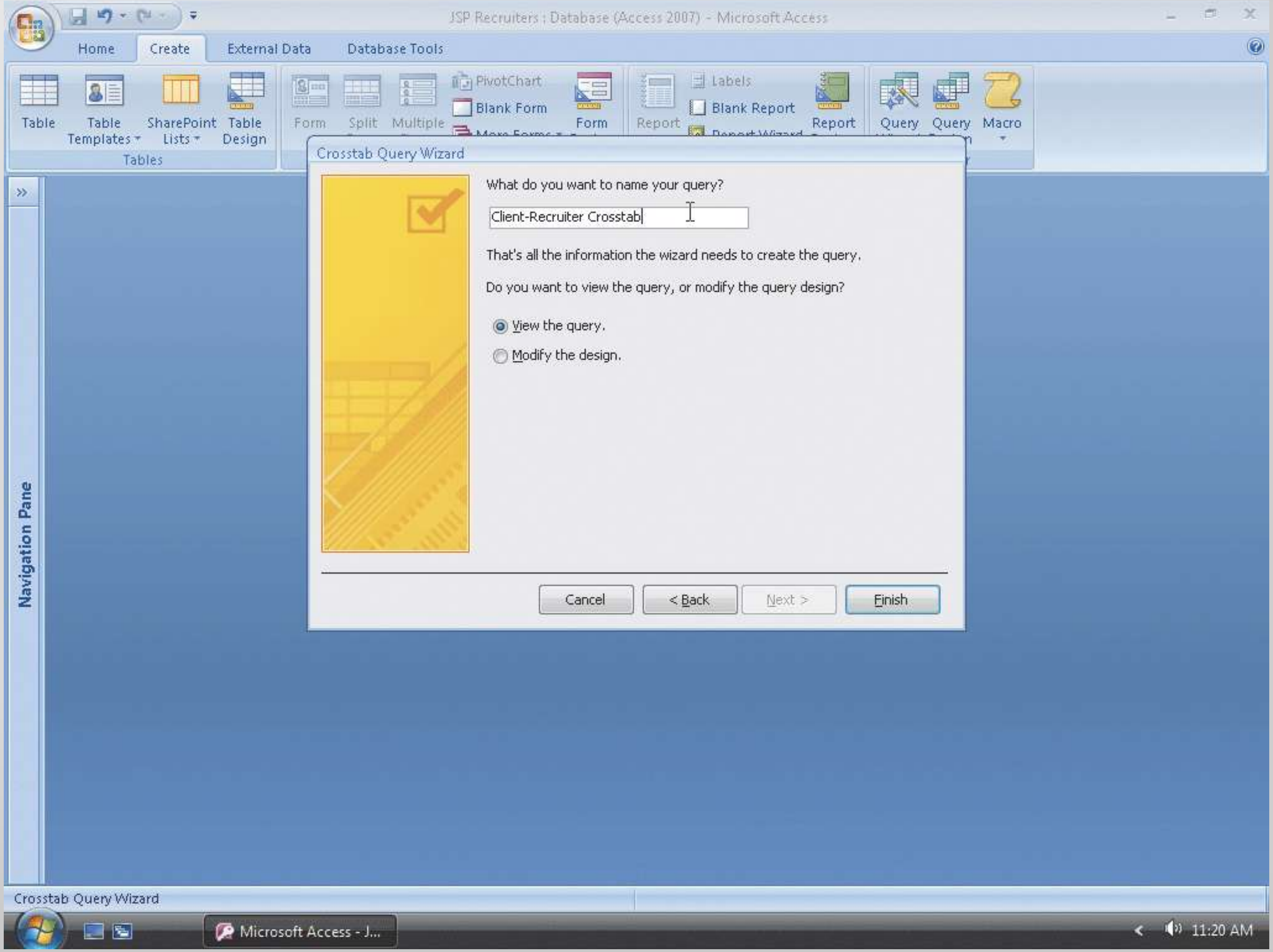
Creating a Crosstab Query

- Click the City field, and then click the Add Field button to select the City field for row headings
- Click the Next button to display the next Crosstab Query Wizard screen
- Click the Recruiter Number field to select the Recruiter Number field for column headings
- Click the Next button to display the next Crosstab Query Wizard screen
- Click the Amount Paid field to select the Amount Paid field for calculations

Creating a Crosstab Query

- Click Sum to select Sum as the calculation to be performed
- Click the Next button to display the next Crosstab Query Wizard screen
- Type `Client-Recruiter Crosstab` as the name of the query
- Click the Finish button to produce the crosstab shown in Figure 2–75 on page AC 122
- Close the query

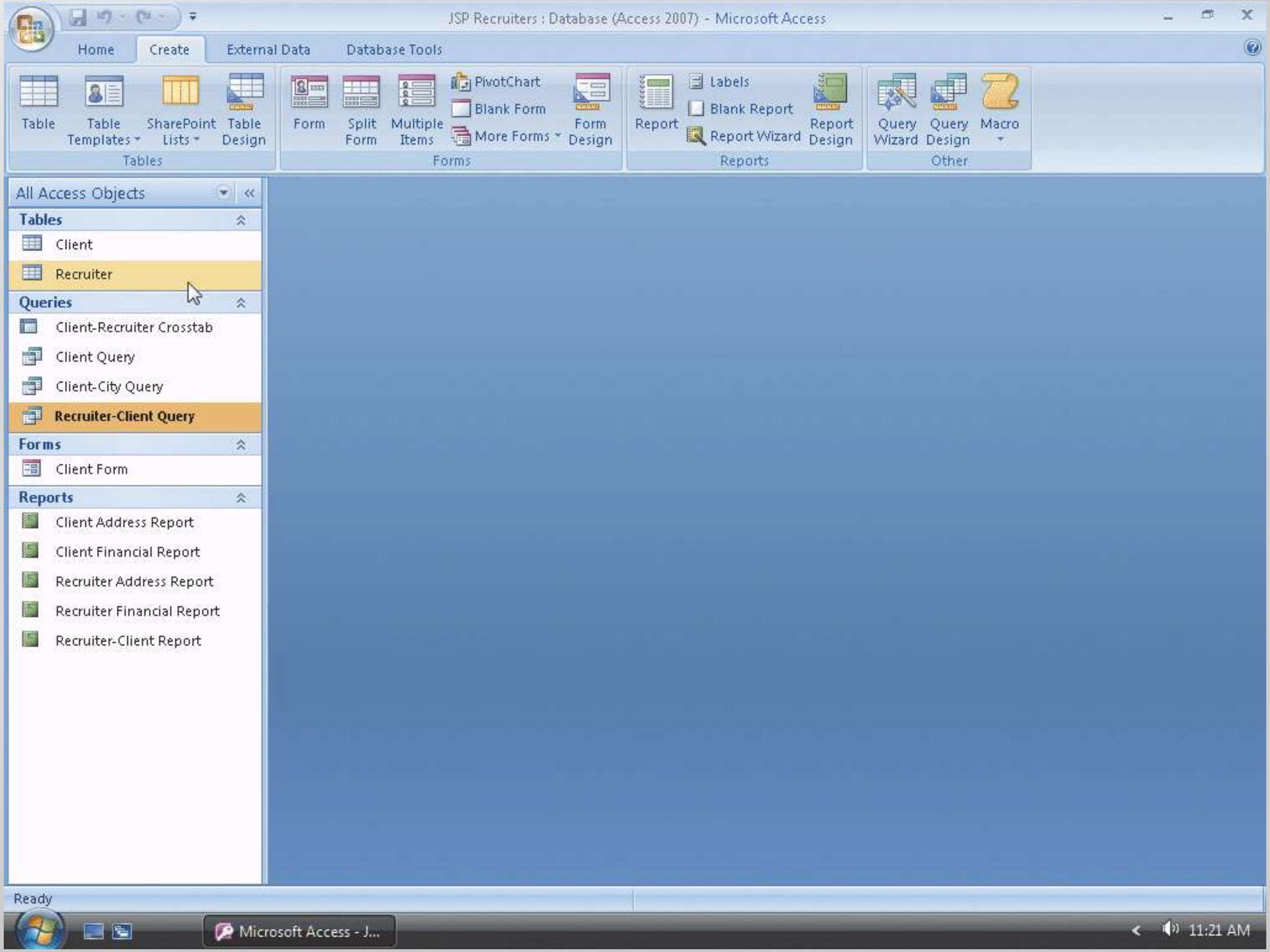
Creating a Crosstab Query



Customizing the Navigation Pane

- If necessary, click the Shutter Bar Open/Close Button to show the Navigation pane
- Click the Navigation pane arrow to produce the Navigation pane menu
- Click Object Type to organize the Navigation pane by the type of object rather than by table
- Click the Navigation pane arrow to produce the Navigation pane menu
- Click Tables and Related Views to once again organize the Navigation pane by table

Customizing the Navigation Pane



Quitting Access

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

Summary

- Create queries using the Simple Query Wizard
- Print query results
- Create queries using Design view
- Include fields in the design grid
- Use text and numeric data in criteria

Summary

- Create and use parameter queries
- Save a query and use the saved query
- Use compound criteria in queries
- Sort data in queries
- Join tables in queries

Summary

- Create a report from a query
- Perform calculations in queries
- Calculate statistics in queries
- Create crosstab queries
- Customize the Navigation pane

Microsoft Office 2007

Access Chapter 2 Complete