Microsoft Access 2010

Chapter 3

Maintaining a Database

SHELLY
CASHMAN
SERIES.
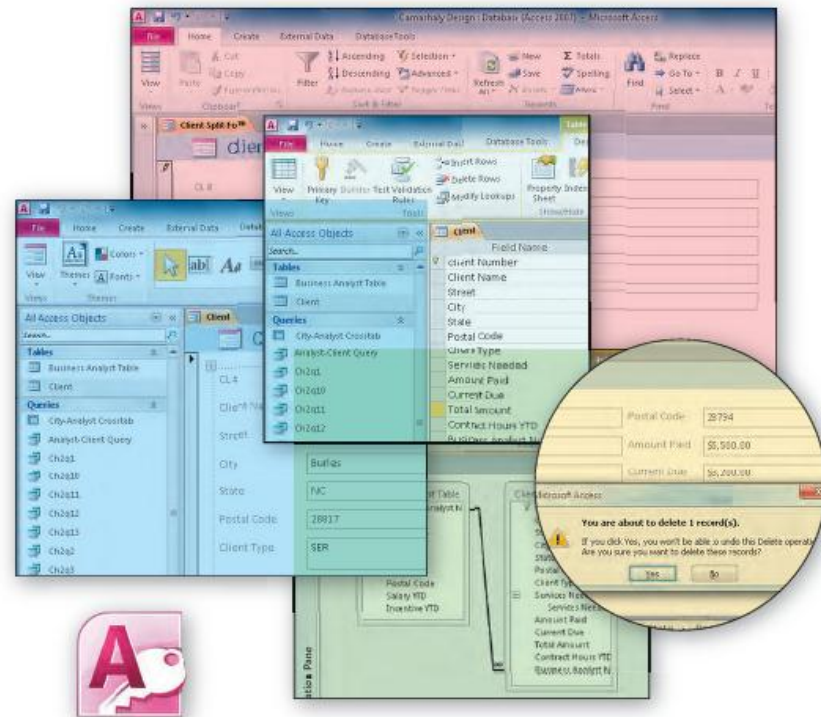
Objectives

- Add, change, and delete records

- Search for records

- Filter records

- Update a table design

- Use action queries to update records

- Use delete queries to delete records

- Specify validation rules, default values, and formats

Objectives

- Create and use single-valued lookup fields
- Create and use multivalued lookup fields
- Add new fields to an existing report
- Format a datasheet
- Specify referential integrity
- Use a subdatasheet
- Sort records

Project – Maintaining a Database

General Project Guidelines

- 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 change to the format of a datasheet are desirable
- Identify related tables in order to implement relationships between the tables

Creating a Split Form

- Open the Navigation Pane
- Select the table in the Navigation Pane you wish to split
- Click Create on the Ribbon to display the Create tab
- Click the More Forms button to display the More Forms menu
- Click Split Form to create a split form
- Close the Navigation Pane

Creating a Split Form

- Click the Form View button on the Access Status bar to display the form in Form view

- Click the Save button on the Quick Access Toolbar to display the Save As dialog box

- Type the desired form name

- Click the OK button

Creating a Split Form
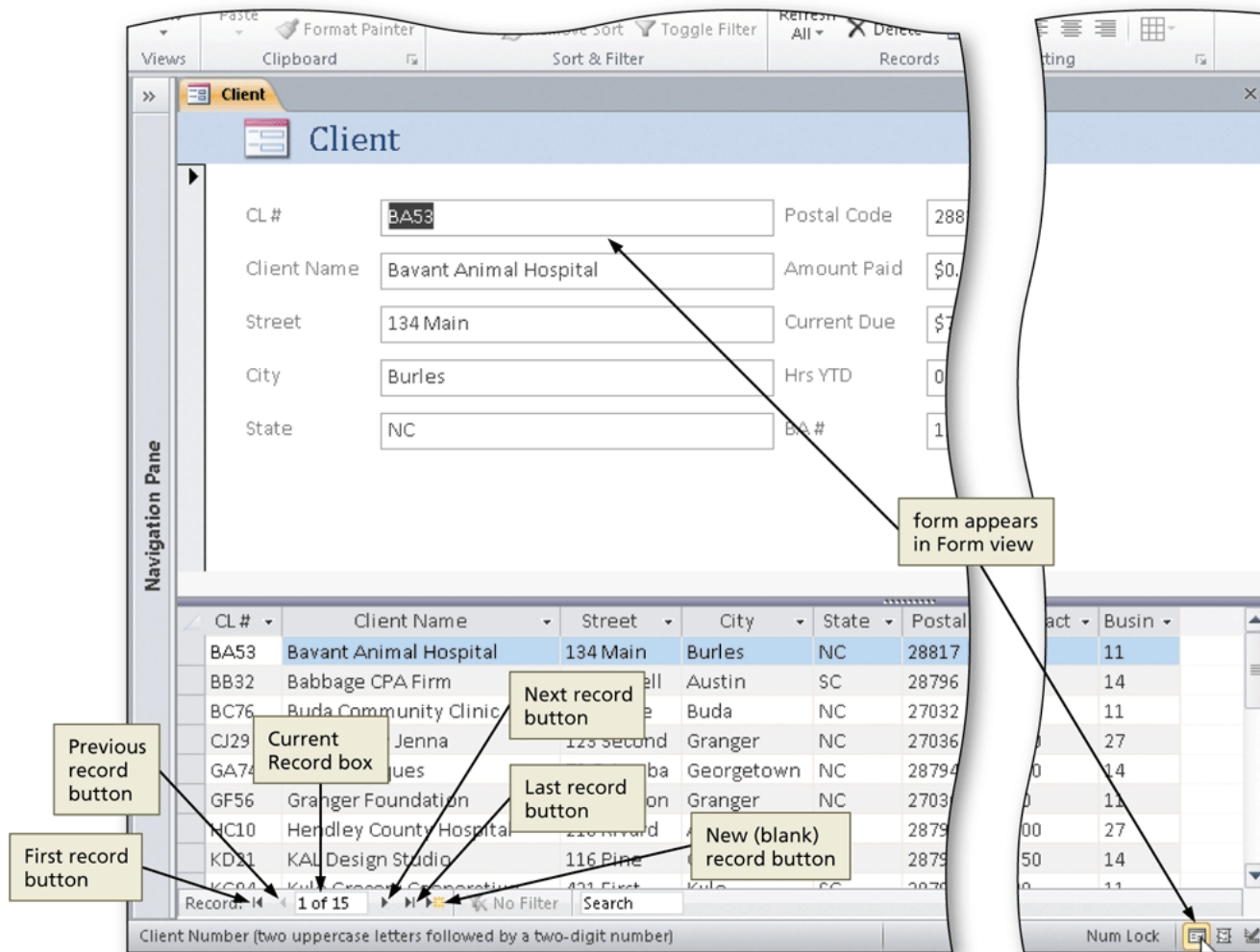
Using a Form to Add Records

- Click the 'New (blank) record' button on the Navigation bar to enter a new record, and then type the data for the new record. Press the TAB key after typing the data in each field
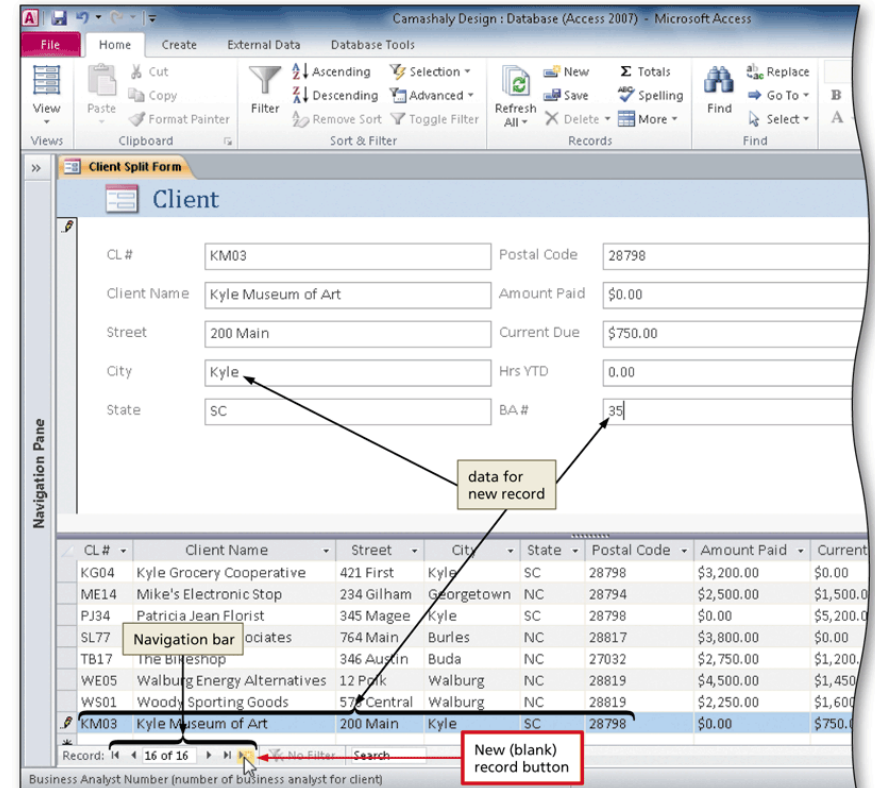
Searching for a Record

- Open the Navigation Pane
- Scroll as necessary and right-click the form to search, and then click Open on the shortcut menu
- Click the Find button on the Home tab to display the Find and Replace dialog box
- Type the desired search text in the Find What text box
- Click the Find Next button
- Click the Find Next button again (as necessary) to locate additional matches
- Click the Cancel button

Searching for a Record

Updating the Contents of a Record

- Click the field you wish to update

- Type the updated text

- Press the TAB key to complete the change and move to the next field
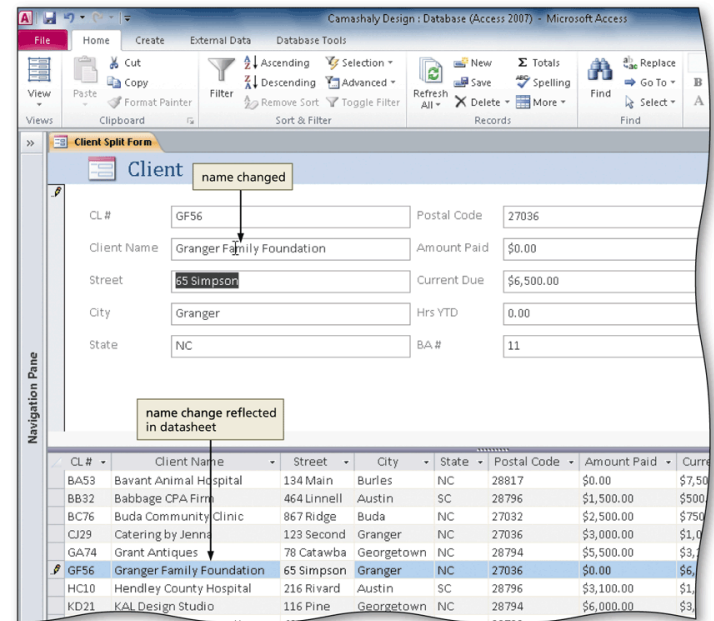
Deleting a Record

- With the form displayed, click the record selector in the datasheet next to the field you wish to delete

- Press the DELETE key to delete the record

- Press the Yes button to complete the deletion

Deleting a Record

Using Filter By Selection

- Open the table containing the field you wish to filter

- Click the a value in the field you wish to filter

- Click the Selection button on the Home tab to display the Selection menu

- Click the desired selection option to select only the matching records

Using Filter By Selection

Toggling a Filter

- Click the Toggle Filter button on the Home tab to toggle the filter

Using a Common Filter

- Click the arrow next to the field name (column heading) to filter
- Click the desired filter
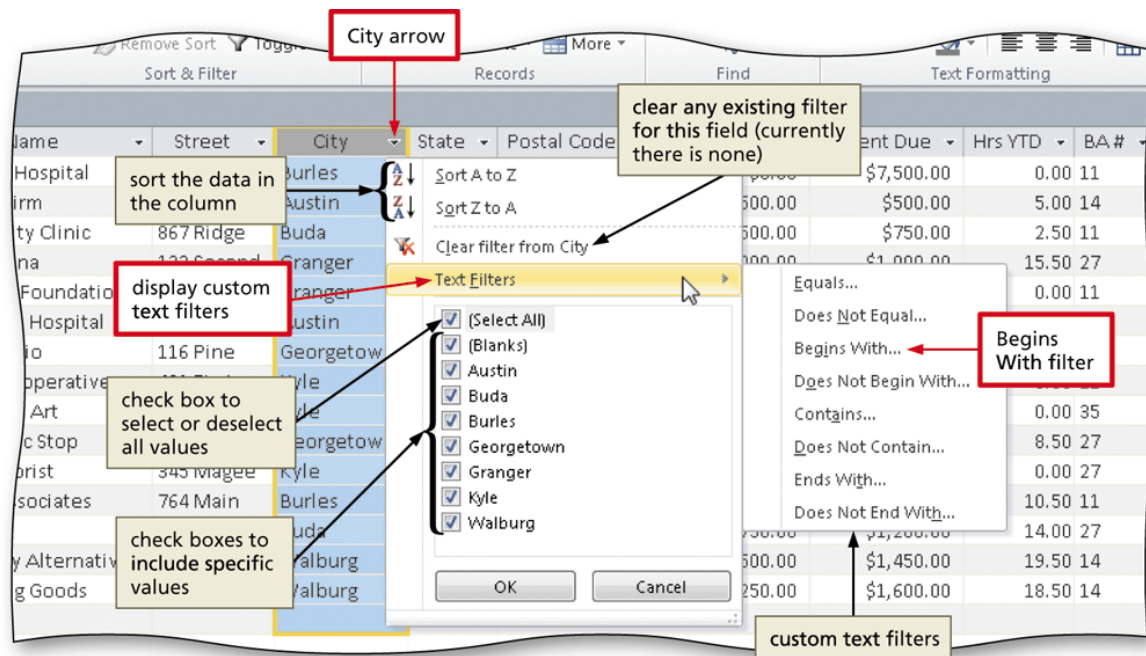
Using Filter By Form

- Click the Advanced button on the Home tab to display the Advanced menu

- Click Clear All Filters on the Advanced menu to clear any existing filters

- Click the Advanced button to display the Advanced menu

- Click Filter By Form on the Advanced menu

- Type the criteria in the blank row for the fields to filter

- Click the Toggle Filter button to apply the filter

Using Filter By Form

Using Advanced Filter/Sort

- Clear the existing filters
- Click the Advanced button to display the Advanced menu
- Click Advanced Filter/Sort on the Advanced menu
- If necessary, expand the size of the field list so all the fields appear
- Drag the desired fields to include in the advanced filter/sort, and type the appropriate criteria in the Criteria or 'or' row
- Click the Toggle Filter button on the Home tab to toggle the filter so that only records that satisfy the criteria will appear

Using Advanced Filter/Sort

Adding a New Field

- Open the desired table in Design view

- Click the row selector below where you wish to insert the new field, and press the INSERT key to insert a blank row above the selected field

- Type the desired field name in the Field Name column
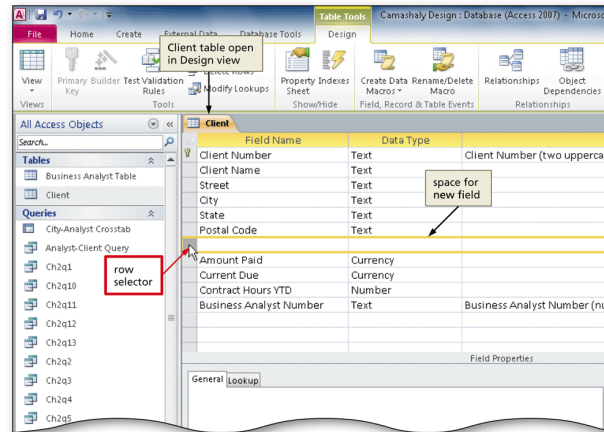
Creating a Lookup Field

- Click the Data Type column for the field you wish to set as a lookup field, and then click the Data Type box arrow to display the menu of available data types
- Click the Lookup Wizard, and then click the 'I will type in the values that I want' option button
- Click the Next button
- Type the list of values (one item per row)
- Click the Net button
- Enter the label for the lookup field, and click the 'Allow Multiple Values' check box if necessary
- Click the Finish button

Creating a Lookup Field
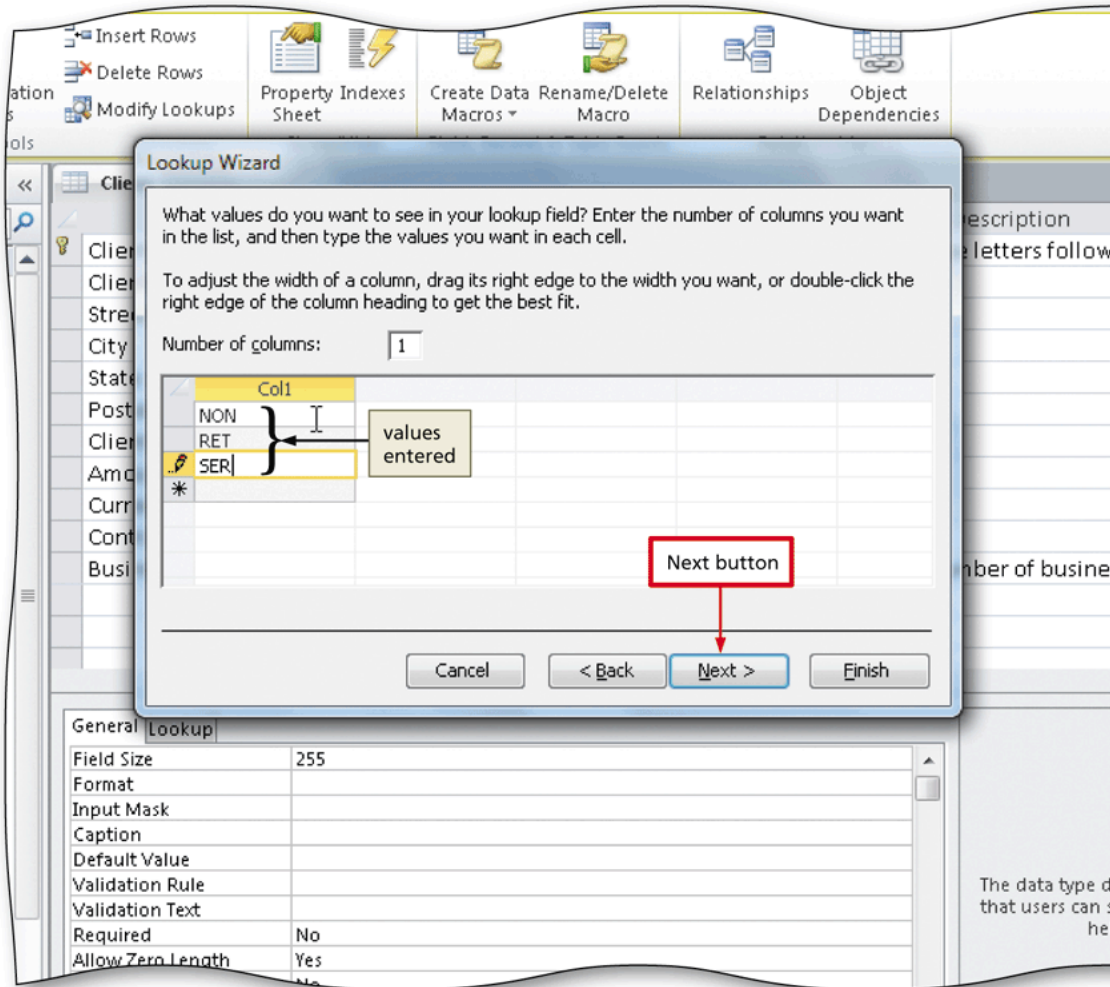
Adding a Calculated Field

- Insert a new field, and type the desired field name in the Field Name column

- Click the Data Type box, and then click Calculated to select the Calculated data type and display the Expression Builder dialog box

- Create the desired expression, and then click the OK button

Adding a Calculated Field
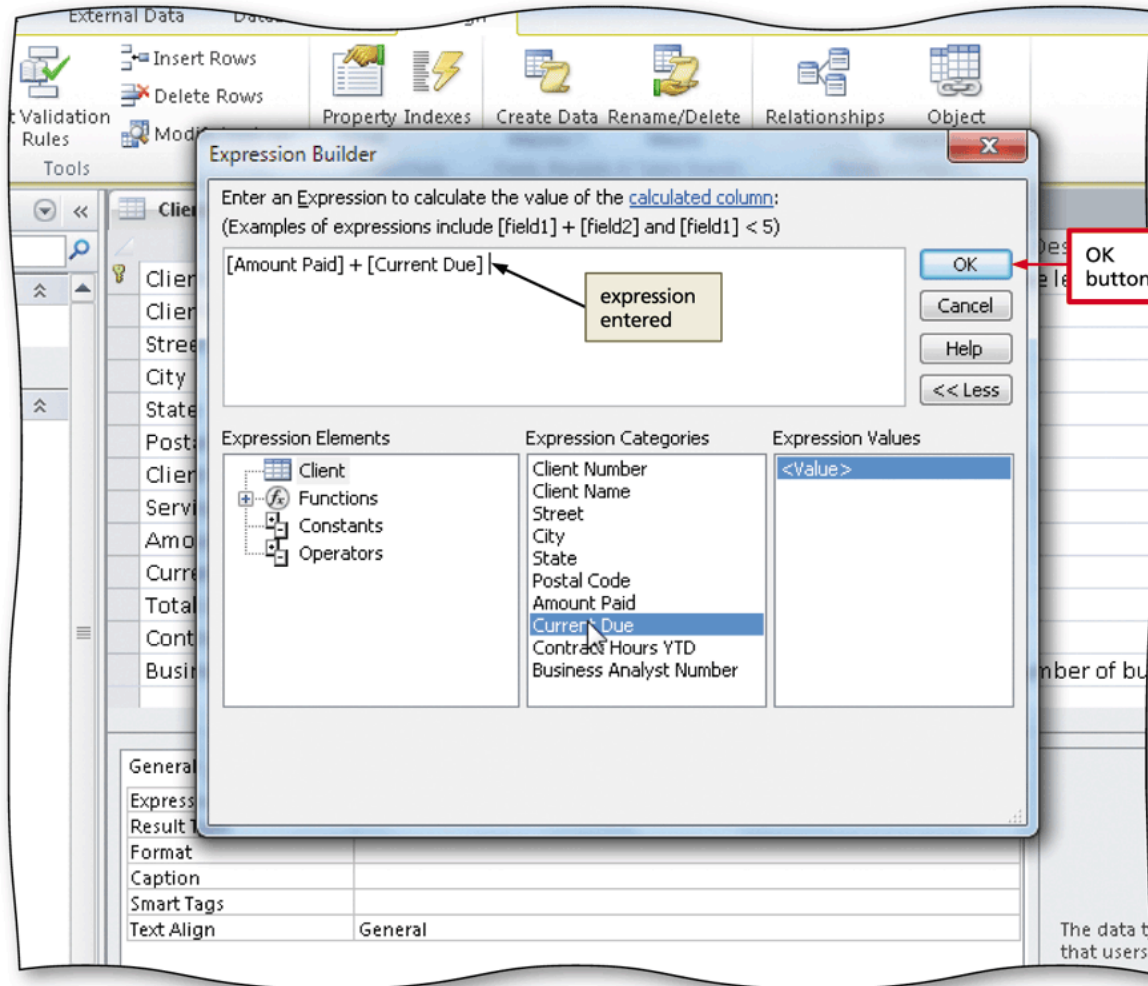
Using an Update Query

- Create a new query for the desired table
- Click the Update Query button on the Query Tools Design tab
- Double-click the field to update, and then type the value to update the field to in the Update To row
- Click the Run button to run the query and update the records
- Click the Yes button to make the changes

Using an Update Query
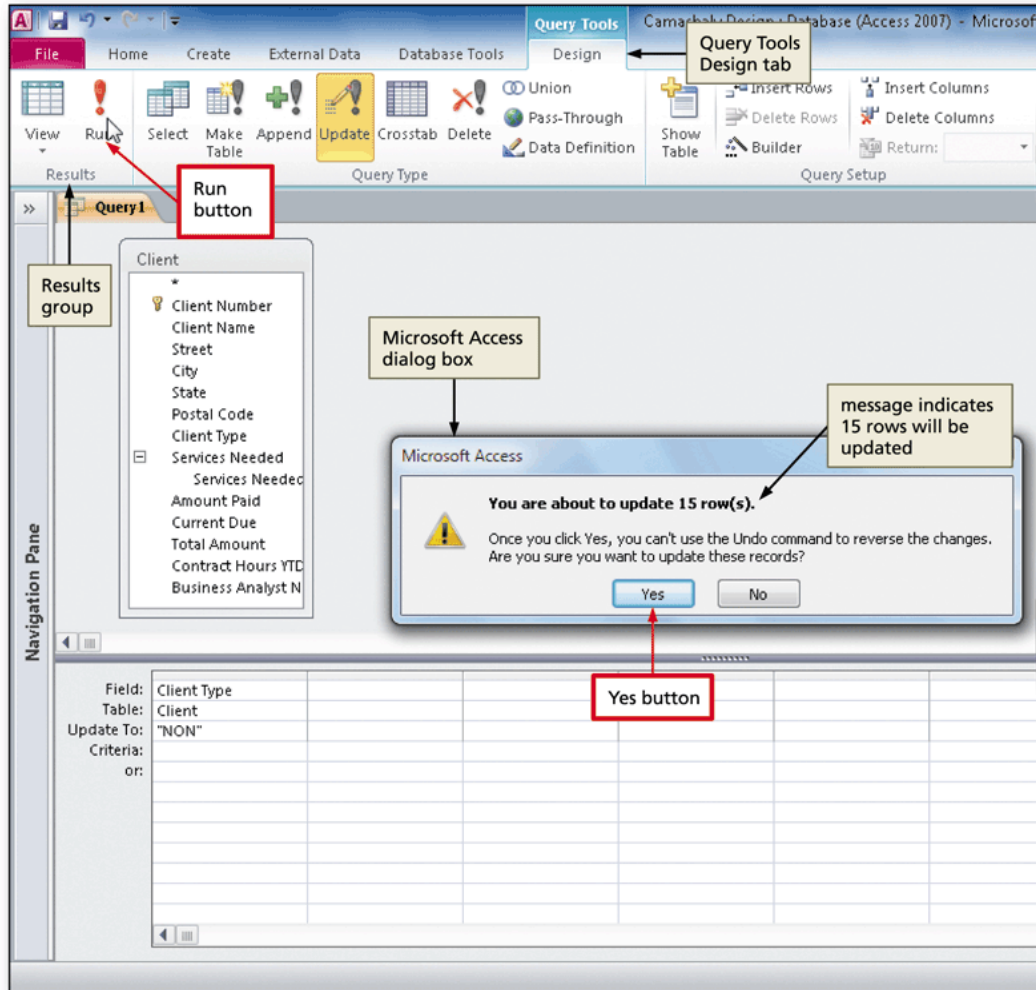
Using a Delete Query

- Create a new query for the desired table
- Click the Delete button on the Query Tools Design tab to make the query a delete query
- Double-click the field containing the criteria for the records to delete
- Click the Criteria row and then type the desired criteria
- Run the query by clicking the Run button
- Click the Yes button to acknowledge the number of records to be deleted
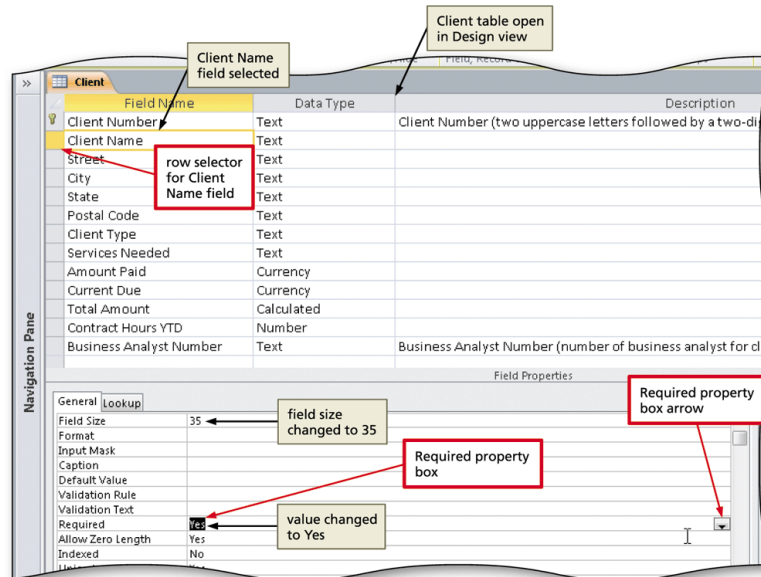
Using a Delete Query

Specifying a Required Field

- In Design View, click the Required property box in the Field Properties pane next to the desired field to make required

- Click the down arrow that appears, and then click Yes

Specifying a Range

- In Design View, click the desired field for which you want to specify a range, and then click the Validation Rule property box

- Type the desired range

- Type the desired validation text in the Validation Text property box

Specifying a Range

Specifying the Default Value

- With the field selected in Design View, click the Default Value property box and then type the desired default value
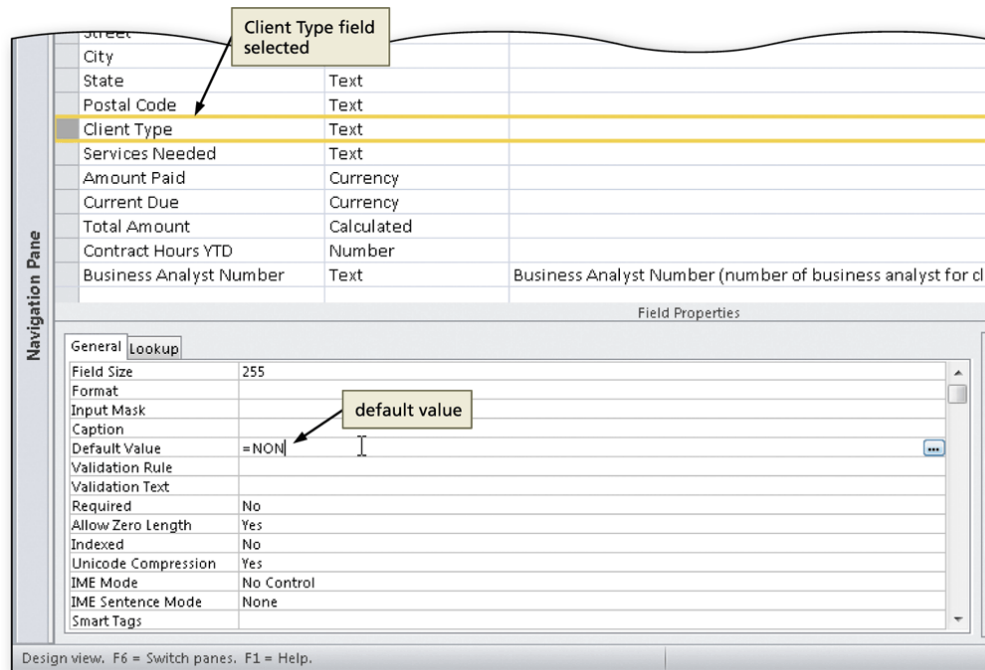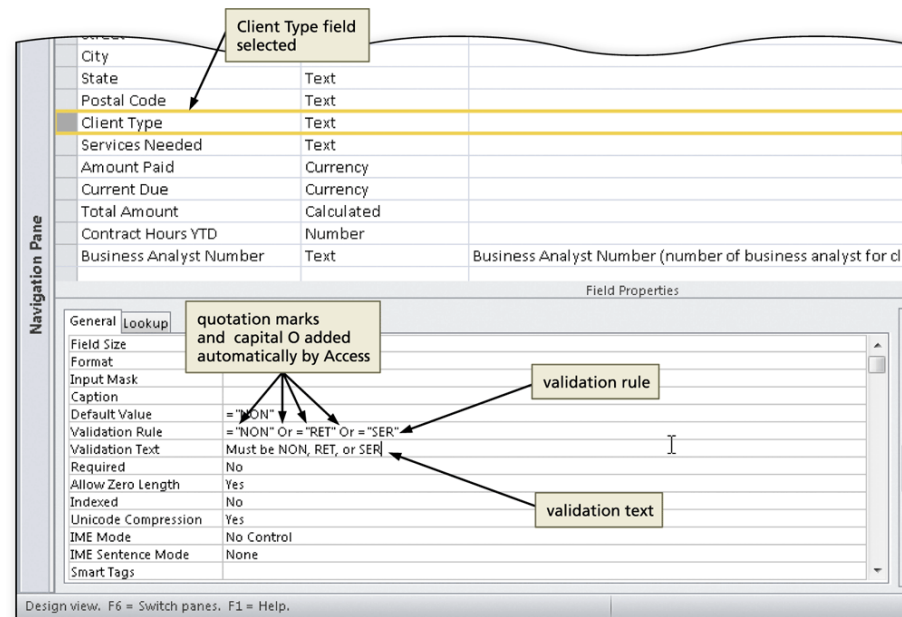
Specifying a Collection of Legal Values

- With the desired field selected in Design view, click the Validation Rule property and type the desired legal values, each preceded by an equal sign

- Type the desired validation text

Specifying a Format

- Select the desired field for which you want to specify a format

- Click the Format property box and then type the desired format
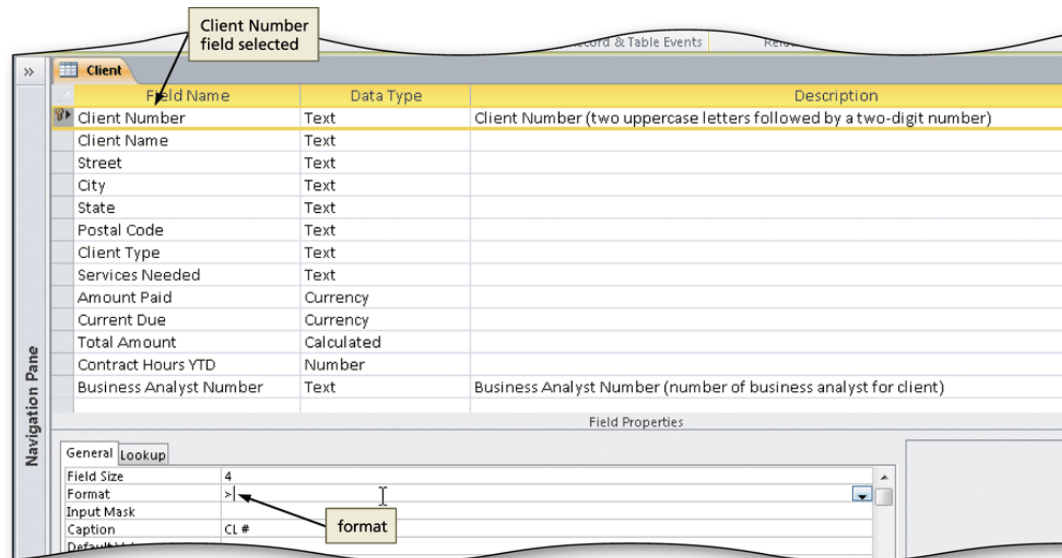
Changing the Contents of a Field

- Open the desired field in Datasheet view

- Click the value for the field you wish to update

- Type the new field contents

- Click the Save button on the Quick Access Toolbar
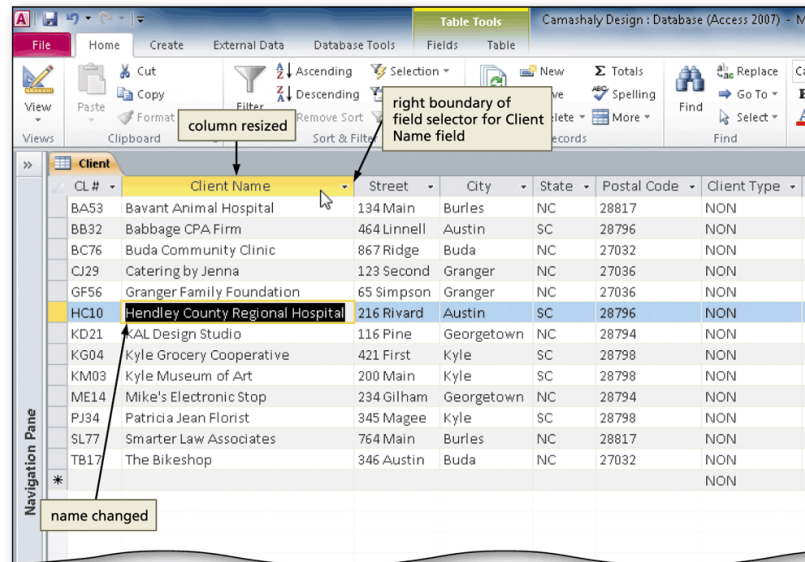
Using a Lookup Field

- Open the table containing the lookup field in Datasheet view

- Click the arrow next to the lookup field to display a list of choices

- Select the desired choice
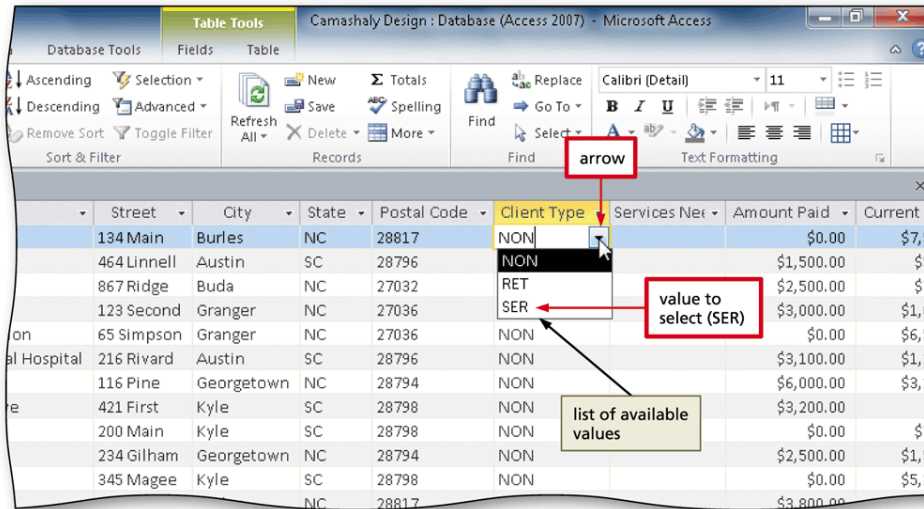
Using a Multivalued Lookup Field

- Click the arrow next to a multivalued lookup field value to display a list of available options

- Click the desired options

- Click the OK button
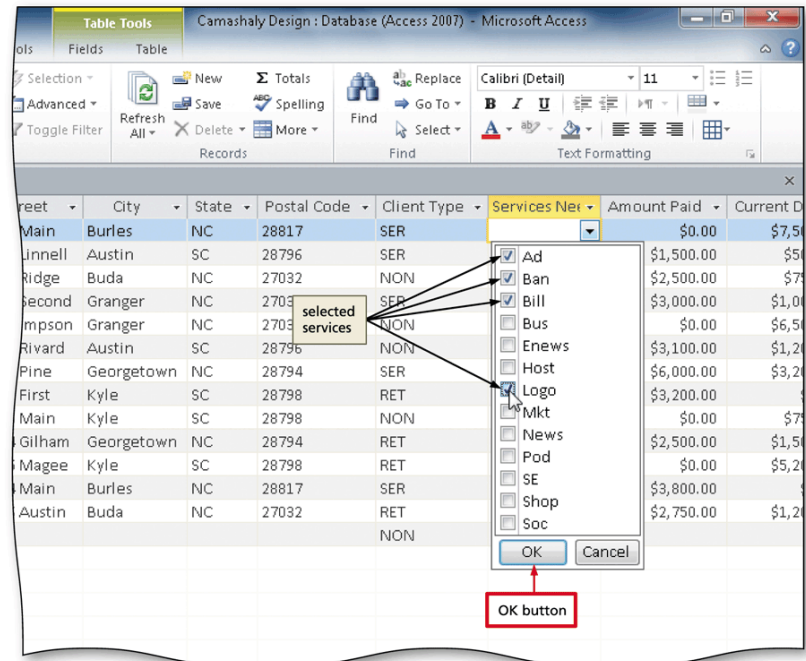
Updating a Form to Reflect the Changes in the Table

- Delete the existing form by right-clicking the form in the Navigation Pane, and then clicking Delete on the shortcut menu. Click the Yes button to confirm the deletion
- Click the desired table in the Navigation Pane to select the table
- Click Create on the Ribbon to display the Create tab
- Click the Form button to create a simple form
- Click the Save button on the Quick Access Toolbar, and then type the desired form name
- Close the form

Updating a Form to Reflect the Changes in the Table

Updating a Report to Reflect the Changes in the Table

- Open the report you want to modify in Layout View
- Resize columns as necessary by pointing to the right-hand border of the column heading so that the mouse pointer becomes a two-headed arrow , and then drag the pointer to resize the field
- To add fields to the report, click the Add Existing Fields button on the Report Layout Tools Design tab to display a field list
- Point to the field you want to add, press and hold the left mouse button, and then drag the mouse pointer until the line to the left of the mouse pointer is at the location where you want to add the field

Updating a Report to Reflect the Changes in the Table

- Repeat the previous steps as necessary to add additional fields

- To change the orientation of the report to Landscape, click the Landscape button on the Report Layout Tools Page Setup tab

Updating a Report to Reflect the Changes in the Table

Including Totals in a Datasheet

- Open the desired table in Datasheet view
- Click the Totals button on the Home tab to include the Total row in the data sheet
- Click the Total row in the desired column
- Click the arrow to display a menu of available calculations
- Click the Desired calculation

Including Totals in a Datasheet

Changing Gridlines

- Open the table in Datasheet view
- 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 desired command in the Gridlines gallery

Changing Gridlines

Changing the Colors and Font in a Datasheet

- With the datasheet selected, click the Alternate Row Color button arrow on the Home tab to display the color palette

- Click the desired color

- Click the Font Color button arrow, and then click the desired font color

- Click the Font box arrow, and then scroll and click the desired font

- Click the Font Size box arrow, and click the desired font size

Changing the Colors and Font in a Datasheet
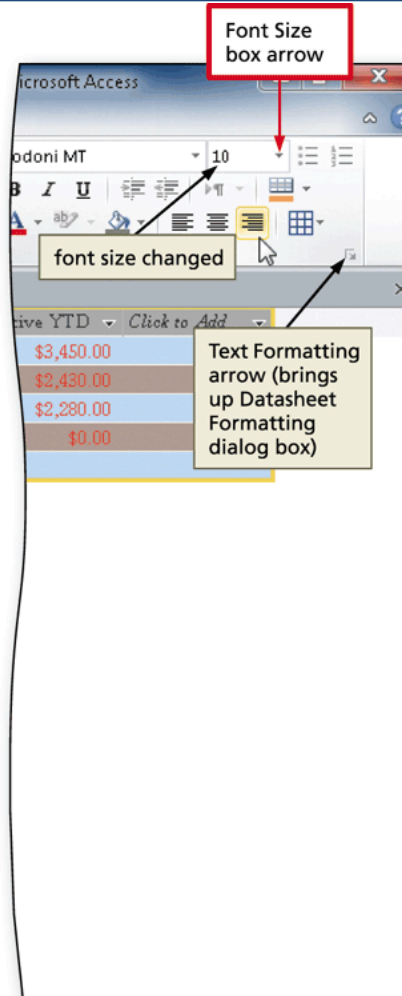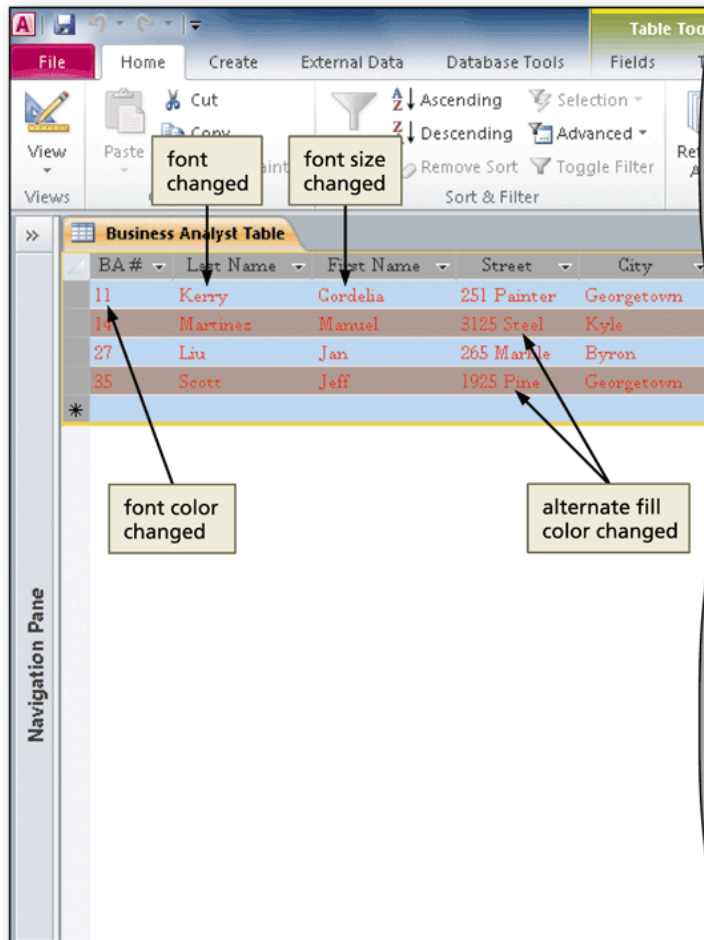
Querying a Multivalued Field Showing Multiple Values on a Single Row

- Create a query for the desired table

- Include fields you want in the query, including a multivalued field
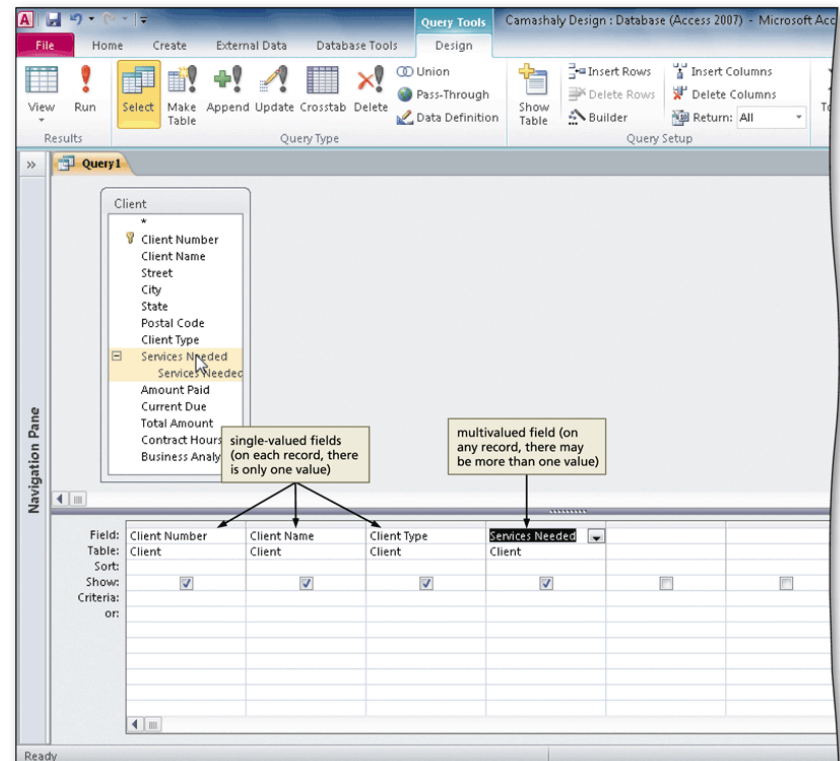
Querying a Multivalued Field Showing Multiple Values on Multiple Rows

- Create a query in Design view containing a multivalued field containing multiple values

- Click the multivalued field name in the design grid, position the insertion point at the end, and then type `.value` to use the Value property

- View the results

Querying a Multivalued Field Showing Multiple Values on Multiple Rows
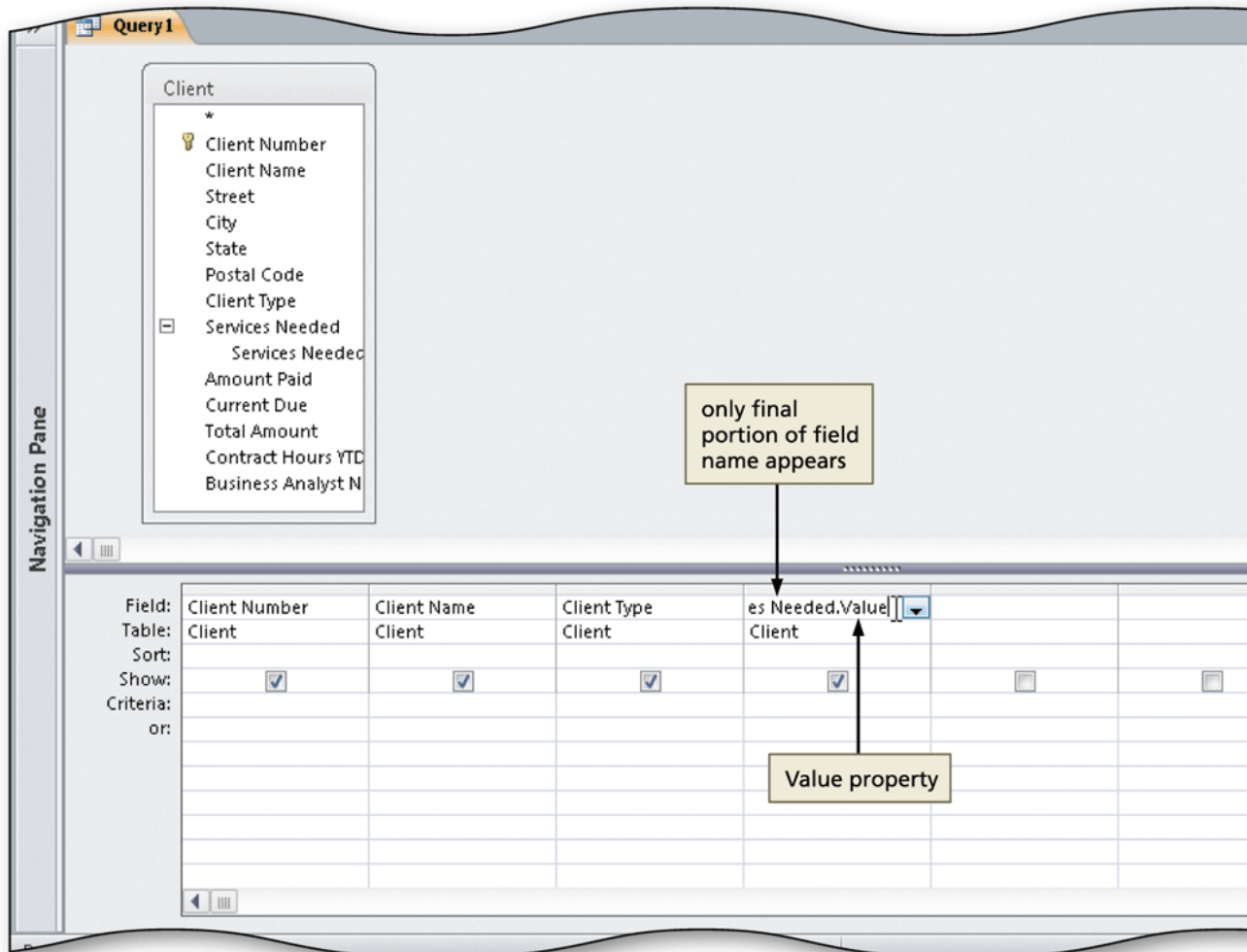
Specifying Referential Integrity

- Click Database Tools on the Ribbon to display the Database Tools tab

- Click the Relationships button to open the Relationships window and display the Show Table dialog box

- Add the tables with associated primary and foreign keys

- Drag the primary key from the first table to the foreign key in the second table to display the Edit Relationships dialog box to create a relationship

- Click the Enforce Referential Integrity check box

- Click the Cascade Update Related Fields check box

- Click the Create button to complete the creation of the relationship

Specifying Referential Integrity
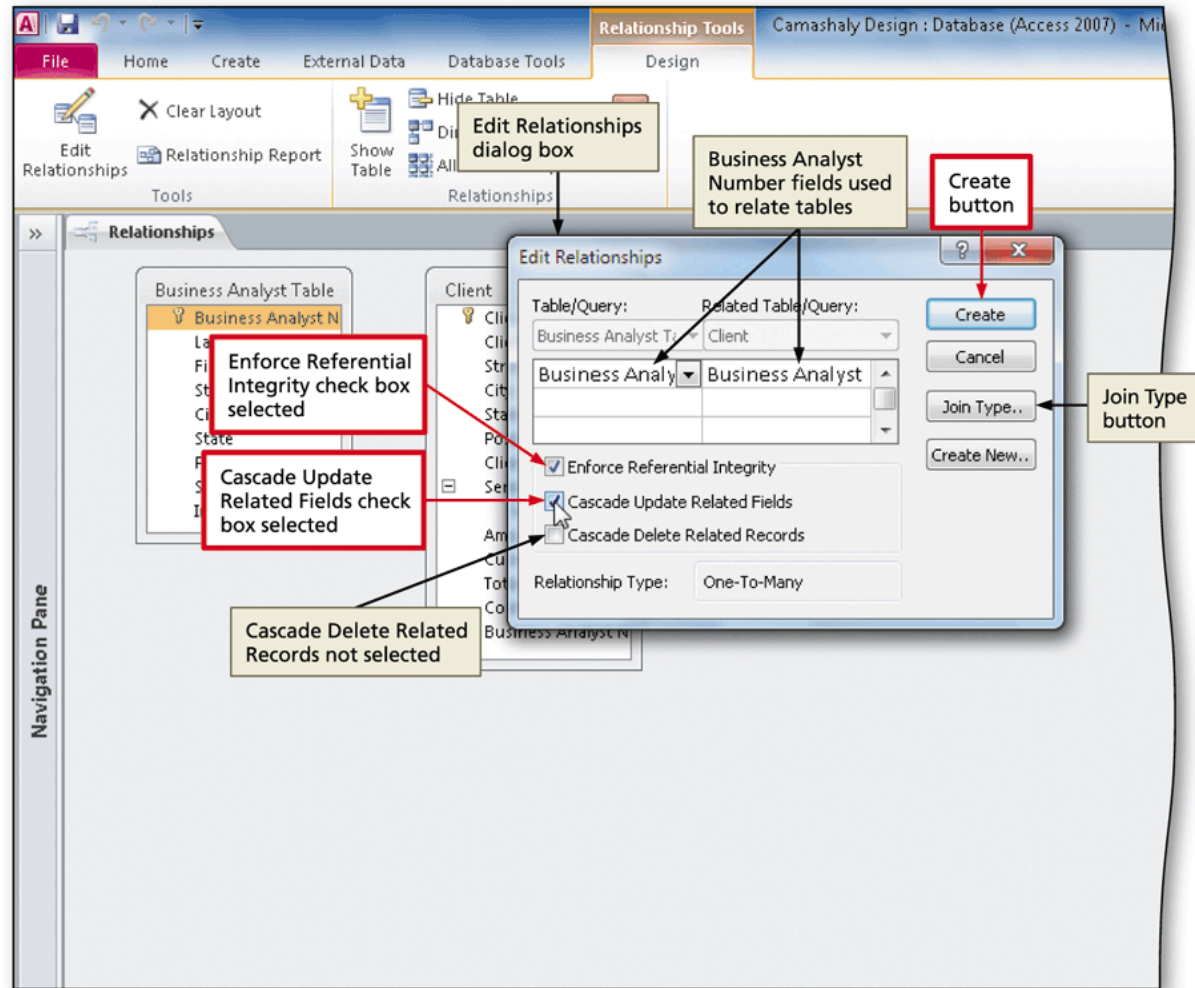
Using a Subdatasheet

- Open the table related another table in Datasheet view

- Click the plus sign in front of the row for a record to display the subdatasheet
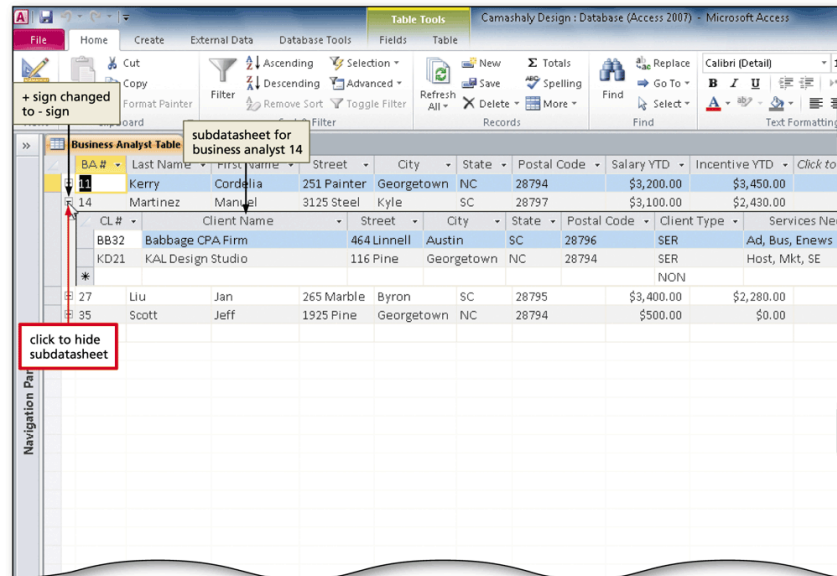
Using the Ascending Button to Order Records

- Open the desired table in Datasheet view
- Click in the first record on the field to sort
- Click the Ascending button on the Home tab to sort the records in ascending order

Using the Ascending Button to Order Records

Chapter Summary

- Add, change, and delete records

- Search for records

- Filter records

- Update a table design

- Use action queries to update records

- Use delete queries to delete records

- Specify validation rules, default values, and formats

Chapter Summary

- Create and use single-valued lookup fields

- Create and use multivalued lookup fields

- Add new fields to an existing report

- Format a datasheet

- Specify referential integrity

- Use a subdatasheet

- Sort records

Microsoft Access 2010

Chapter 3 Complete

SHELLY
CASHMAN
SERIES.