

CHAPTER-FOUR

QUERIES

WHAT IS QUERY?

Query is a database object that you create to look for particular information in the database.

It also use to View, Change, Analyze data and so on

By using queries you can

- ❖ Choose fields
- ❖ Choose records
- ❖ Sort records
- ❖ Perform calculation
- ❖ Update tables

Types of quires

Queries can be broadly classified in to two types. Those are

1. Selection query
2. Action query

1. Select query

A select query retrieves data from one or more tables and displays the result in a datasheet where you can update the records.

It also used to group records and calculate sums, counts, averages and other types of totals.

2. Action query

An Action query is query that makes change to many records in just one operation. There are four action queries: These are

- A. Delete query
- B. Update query
- C. Append query
- D. Make-Table query

Creating queries

We can create query with a design or using a wizard.

To create query by using wizard

1. In the database window, click the queries tab
2. Double click the tab create query by using wizard
3. Select the name of the table or query from tables
4. Select the fields from available fields list box
5. Click an additional table or query if desired, and then select the fields you want to use from it. Repeat this steps until you have all the fields you need. Click next
6. Give title for your query
7. Then click finish

Design or modifying queries

To add a table or query to query

1. Open a query in design view
2. In the show table dialog box, click the tab that lists the table
3. Click the name of the object you want to add to the query
4. Click add button and then click close button

To remove a table or a query from a query

1. Open a query in design view.
2. In the upper part of query design view, select the table or query you want to remove by clicking anywhere in its field list, and then press the delete key.

Forms

What is Form?

Like a paper form that you fill out with a pen or a pencil, Microsoft Access form indicates the data that you want to collect.

It also gives you a way to enter data into your tables, display it for review, and print it for distribution.

Forms let you View, Enter, and print data in a way that is easier to use than a table or datasheet. One record at a

You use forms to present or input one record at a time.

The major purpose of Access Forms

Produce a form that looks like a paper from you are familiar with;

Present your data in an attractive way with fonts and other graphical effects such as color and shading;

Display data from more than one table; and

Perform calculation using existing data from table

Creating A Form

You can create a form on your own or you can have MS-Access create your form for you using Wizard.

I. Create a form using Auto Form

Auto form creates a form that displays all fields with each record at a time in the selected table or query. Each field appears on separate line with a label to its left.

To create a Form using Auto Forms

1. In the database window, click the table or queries tab, if it is not attractive.
2. Click the table or query you want to base the form on, or open the table or query in any view
3. Click the arrow next to the New object button on the toolbar, and then click Auto Form

II. To create a Form with a wizard

1. In the database window, click the forms tab, if it is not active.
2. Double click the tab create form by using wizard
3. Click the name of the table or query you want to use
form Tables/Queries box
4. Select the fields you want to use from Available Fields
box, and click next
5. Select the Layout type for the form, and click next
6. Select the Style you like for your form, and click next
7. Give Title for the form and click Finish

III. To create a form in design view

1. In the database window, click the forms tab, if it is not active
2. Click on the tab create form in design view
3. Click on new button located on the database window
4. Click design view
5. Click on the name of table/query you want to use for
the form choose the table or query box
6. Click ok
7. Display the field list by clicking field list on the toolbar,
if it is not already displayed
8. Select one or more fields in the field lists
9. Drag the selected field or from field list to the form

Working in design view

Forms have three views: These are

1. Design view
2. form view, and
3. Datasheet view

Design view used to create form and the rest two (form view and datasheet view) views used to view the created forms.

To select a form

1. Open form in design view
2. Click the form selector found at the intersections of the rulers.

To select a section on a form

1. Open a form in design view
2. Click the section selector or anywhere in section bar.

To display or hide the grid

1. Open a form in design view
2. On the view menu, click grid

Working with controls on form

 All the information on a form is contained in controls.

- Controls are objects on a form that display data, or decorate the form.

MS-Access include the following types of controls, which are all accessible through the toolbox in form design view :text box, option group, option button, check box, toggle button, combo box, list box, command button, image control, bound object frame, unbound object frame, sub form/ sub report, page break line and rectangle.

- ✓ Controls can be bound, unbound, or calculated.
- ✓ A bound control is tied to a field in an underlying table or query
 - ☺ You use bound control to display, enter, and update values from fields in your database.
- ✚ A calculated control uses an expression as its source of data.
- ✓ An unbound control doesn't have a data source.
 - ☺ You can use unbound control to display information, lines rectangles and pictures.

Labels and text boxes

You use labels on a form to display descriptive text such as titles, captions or brief instructions.

Label doesn't display values from fields or expression; they are always unbound and they don't change as you move from record to record.

To create label

1. Open a form in a design view
2. Click the label tool from the toolbox
3. On the form click where you want to place the label, and then type the text for the label

To change label text

1. Open a form in design view
2. Click the label and then, click on the label text
3. Type the new text

Text box

You use text boxes on a form to display data from a table, or query.

This type of

Text box also can be unbound.

To create a bound text box

1. Open a form in design view
2. Click field list on the toolbar to display the field list
3. Select one or more fields in the Field list
4. Drag the field from the field list and position them on the form
5. Size the text box so that it is the appropriate size for the data you want to show
6. Change the label text if necessary

7. Switch to Form view, Datasheet view or Print Preview to test the control

To create an unbound text box

1. Open a form in design **view**
2. click the text box tool in the toolbox
3. Click anywhere in the form to create a default, sized text box, or drag to create a text box that is the size you want.

COMBO BOXES

In many case, it is quicker and easier to select a value from a list than to remember a value to type. A list of choices also helps to ensure that the value that is entered in a field is correct.

- ↴ An advantage of combo boxes is that you can type the first few characters of a value in the combo box to quickly find that value.
- ↴ Also you can control whether any value can be entered in the list or only text that matches one of the values in the list.

To create a combo box in design view

1. Open the table in design view

2. Select the data types of the field for which you want to create a combo box
3. Click on lookup tab in the field properties window
4. In display control list box, select combo box
5. In the Row Source type property, select Value List

Printing and previewing

To set margins, page orientation, and other page settings:

1. Open the database object in one of the following views
 - ▶ Open a table or query in datasheet view or print preview
 - ▶ Open a form in any view
2. On the file menu click page setup
3. Click the following tabs for the option you want to set
 - ♦ Margins: to set margins and whether to print data only
 - ♦ Page: to set orientation, paper size and printer
 - ♦ Columns: to set number, size and layout of columns for forms
4. Click ok

To preview a form from design view, form view, or datasheet view:

1. Click print preview on the toolbar

2. To return to design view, form view, or datasheet view, click the view button on the toolbar.

To preview a form from the database window:

1. Click the form tab
2. Select the form you want to preview
3. Click print preview

To print a form from the database window

1. Click the forms tab, if it is not active
2. Select the form you want to print
3. On the file menu, click print
4. In the print dialog box, select the printing option you want
5. Click ok

To print selected records in a form or Datasheet

1. Open the form in datasheet view
2. Select the record you want to print
3. On the file menu, click print
4. In the print dialog box under print range click selected record

To add page numbers to a form:

1. Open the form in design view
2. Click page numbers on the insert menu
3. In the page numbers dialog box select the format, position and alignment for the page number

4. Finally click ok

Working with sections

Section of a form: You increase the effectiveness of a form by adding sections; which are designated elements of the form design.

- Access has five section types for forms, which you can use in any combination.

Some common uses for five sections are

1. **Form header:** Displays the title for the form. When a form is displayed in a form view, the header appears at the top of the screen.
2. **Page header:** Displays information such as title, column headings, or any information you want at the top of every page. A page header appears only on printed forms.
3. **Detail section:** Displays record. You can display one records per screen or page or as many as will fit.
4. **Page footer:** Display information such as date, page number, or any information you want at the bottom of every page. Page footer appears only on printed forms.
5. **Form footer:** When a form is displayed in a form view, the form footer appears at the bottom of the screen. When a form is printed it appears on the last page.

Calculation in a form

To create calculated control

1. Open a form in design view
2. Click on text box tool from tool box and place the box on the form design view
3. Click on the text box to give a name for the field
4. Double click on the text box (unbounded). The text box property will be displayed
5. Do the following
 - o Click on data tab on the property text box
 - o Write a formula in the control source property tab of the text box dialog box

Chapter- 6

Reports

- Report is information you have organized and formatted to fit your specification.
- Report gives you a way to retrieve and present data as meaningful information that you can use and distribute.
- You can use many different design elements, such as text, pictures, lines, boxes, and graphs in creating reports.
- Reports are also an efficient way to print information that you use regularly. You can create design for a report and then save it so that you can use it over and over again.

With access you can create report that:

- ♣ Organize and present data in groups
- ♣ Calculate running totals, groups totals and percentage of totals; and
- ♣ Present your data in an attractive format with pictures, lines, and special fonts.

Creating A Reports

In creating report, data to be contained in the report can come from one or more sources. If all data come from one table, you can use base your report on that table.

If a data comes from more than one table, you must base the report on a query. In MS-Access you can create report with or without the help of wizards.

Access provides two types of wizards: Auto report wizard and Report wizard.

A Report wizard is useful to quickly create a basic report layout that you can use as is or refine to your specification. Report wizard is a fast and foolproof way to create basic report.

To create a report using auto report

1. In the database window, click the reports tab, if it is not active
2. Click new button on the database window

3. In the new report dialog box, click one of the following wizard:

- ▣ **Auto report:** columnar; each field appears on a separate line with a label to its left
- ▣ **Auto report:** tabular; the field in each record appears on a separate line, and the labels print once at the top of each page.

4. Click the table or query that contains the data you want to base your reports from the box choose the table or query.

5. Click ok

To create a report with a wizard:

1. In the database window, click the reports tab, if it is not active
2. Double click on create report by using wizard tab
3. In the report wizard, click the table or query that contains the data
4. Select the field from available fields box
5. Follow the direction in the wizard dialog box to specify the fields, grouping, sort order, the layout of the report the style used

To create a report using design view:

1. In the database window, click the report tabs, if it is not active
2. Click new
3. In the new report dialog box, click design view

4. Click the name of the table or query that contains the data you want to base your report on
5. Click ok
6. Drag the field names into the report design view
7. Click on print preview button

Add a page break to a report

In reports, you use a page break control to mark where you want to start a new page within a section.

To add page break to a report

1. Open the report in design view
2. Click the page break tool in the toolbox
3. Click in the report where you want to place the page break

To add page numbers to a report:

1. Open the report in design view
2. Click page number on the insert menu
3. In the page number dialog box, select the Format, Position, and alignment for the page number.
4. To show number on the first page, select the show number on first page check box
5. To view the page numbers you inserted, click on print preview

Change the size of header, footer , or other section

You can increase or decrease the height of report sections individually. However, a former report has only one width. When you change the width of one section, you change the width of the entire form or report.

To change either height or width:

1. Open the report in design view
2. Change either the height or width by placing the pointer on the bottom edge or right edge of the section
3. Drag the pointer up or down to change the height of section

To change both height and width:

Place the pointer in the lower right corner of the section and drag it diagonally in any direction.

To change the back ground color of a control section

1. Open a report in design view
2. Click the control or section that you want to change
3. On the formatting toolbar click the arrow next to Fill/ back color
4. Click a color in the palette

To hide a section or control on a report

1. Open a report in report design view
2. To open the property sheet for the section that you want to hide, double click the section selection
3. In the **visible** property box, click no

Sorting records

You can sort on up to 10 fields or expression in a report.

To sort records in a report:

1. Open the report in design view
2. Click sorting and grouping on the tool bar to display the sorting and grouping box
3. In the first row of the field/expression column, select a field name, or type an expression
4. To change the sort order, select descending from descending order sorts from Z to A or 9 to 0

To change sorting level of fields in a report

1. Open the report in design view
2. Click sorting and grouping on the tool bar to display the sorting and grouping box\
3. Click in row which holds the field/expression you want to change
4. Click on the down arrow and change the field names you want to sort

To delete a sorting in a report

1. Open the report in design view
2. Click sorting and grouping on the toolbar to display the sorting and grouping box

3. In the sorting and grouping box, click the row selector of the fields you want to delete, and then press delete key
4. Click yes to delete the sorting or click No to keep it.

Hide duplicate data in a report

You can hide duplicate data on a report with sorted records.

To hide duplicate data on a report with only sorted records

1. Create a report that sorts records on one or more fields that might contain duplicate values
2. In report design view, place the text box for all the fields in detail section
3. To display the property sheet for a text box that contain the data that might repeat, double click it
4. Set the hide duplicate property to Yes

Calculation in a report

Top calculate fields:

1. Open the report in design view
2. Add text box to the detail section, next to the control to be calculated
3. Double click the text box to open its property sheet
4. Do one of the following
 - In the control source property box, type an appropriate expression

- Click the build button to use the expression builder to create the expression

5. Switch to print preview to display the results

To calculate a total or average for all records

1. Open the report in design view
2. To calculate a grand total or average for all records in the report, add text box to the report header or footer
3. Double click the text box to open its property sheet
4. Do one of the following
 - ® In the control source property box, type an expression that uses the sum function to calculate a total or the Avg function to calculate an average
 - ® Click the build button to use the expression builder to create the expression.

To calculate percentage in a report

1. Open a report in design view
2. Add the text box next to the fields for which you calculate percentage

3. To the appropriate section, add the text box that calculate the percentage
4. Double click the text box to open the property sheet
5. Do one if the following
 - ♦ In the control source property box, type an expression that divides the values of each record by the sum of total record .
 - ♦ Click the build button to use the expression builder to create the expression.

To count the number of records in a report as a whole

1. Open a report in design view
2. Add the text box to the report header or footer
3. To display the property sheet, make sure the text box is selected, and then click properties on toolbar
4. Set the control source property of the text box to =Count (*). This expression uses the count function to count all the records in the reports even if some fields in some records are Null.

I WANNA TO SAY RAMADAN MUBARAK!!!!

May Allah bless you and increase your knowledge!!!

Dear students please use your time properly. Have a nice time!!!

