XPORTING RECORDS TO MICROSOFT EXCEL

Microsoft Excel comes from the same suite of products as Microsoft Access, so exporting records is easy and relatively effortless. The built-in ***Export Wizard*** automatically converts fields from an Access database into columns and converts Access records into rows. This enables easy export of the data to an Excel workbook.

Try This Yourself:

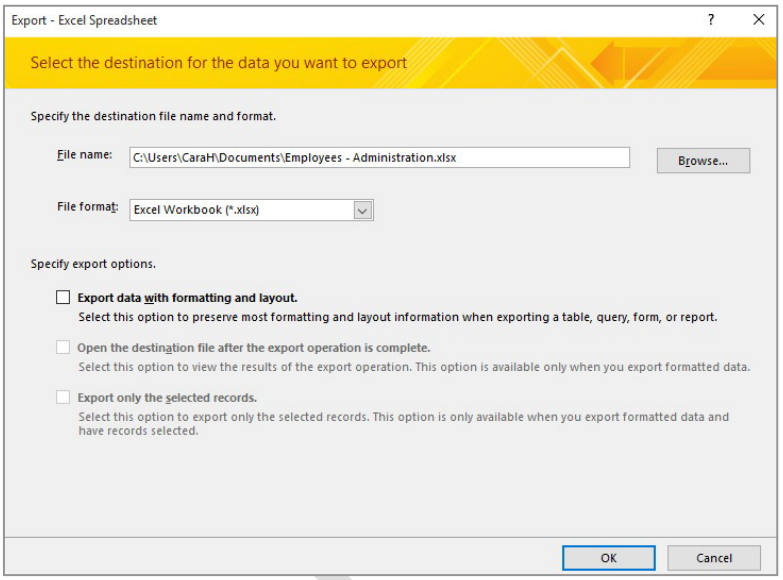
Open File

Before starting this exercise you MUST open the file Exporting Records_1.accdb…

1. In the ***Navigation*** pane, double-click on the table ***Employees – Administration*** to open it
2. Click on the ***External Data*** tab, then click on ***Excel*** in the ***Export*** group to display the ***Export Wizard***

   Here you can specify a destination File name and location…
3. Click on **[Browse]**, then locate and double-click on the course files folder

   We will apply the file name that appears by default…
4. Click on **[Save]**, then click on **[OK]** to perform the export and display the ***Save Export Steps*** option in the wizard
5. Ensure that ***Save export steps*** appears without a tick, then click on **[Close]** to return to the table
6. Close the table



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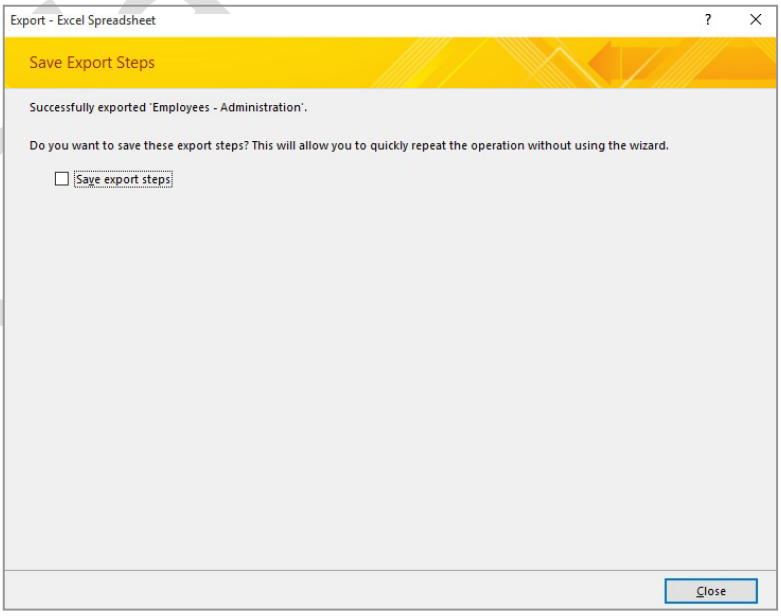

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For Your Reference…

To ***export records*** to ***Microsoft Excel***:

1. Open the table to export
2. On the ***External Data*** tab, click on ***Excel*** in the ***Export*** group
3. Complete the steps in the wizard

Handy to Know…

- The ***Save Export Steps*** options of the ***Export Wizard*** allows you to save any export settings you may have used. This is handy if you need to perform the same operation on a routine basis. If you only do the export as a one-off operation, there is probably no need to retain the steps.

EXPORTING RECORDS TO A TEXT FILE

Text files are the mainstay of data exporting and importing. Virtually every application that has data will have a way of importing and exporting text file formats. So, if you intend to export Access records to an application that doesn't appear in the export options, you can simply export it as text and then import it into the destination application.

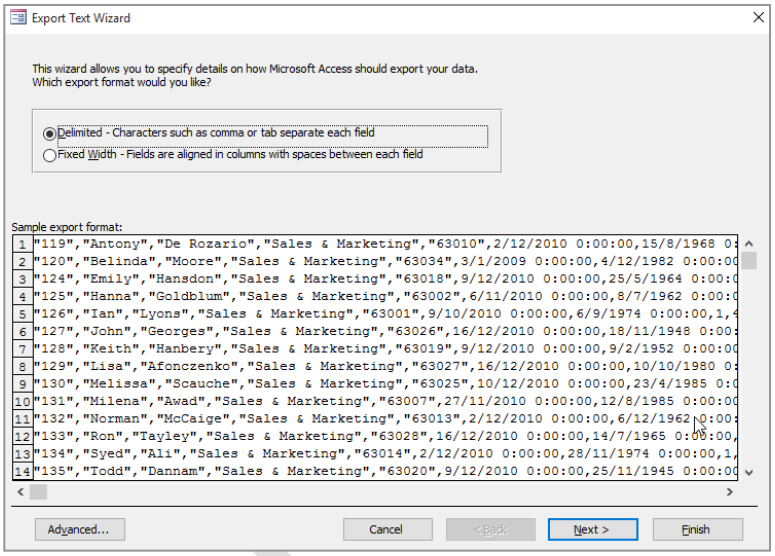
Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Exporting Records_1.accdb...*

1. Open the ***Employees – Sales*** table
2. Click on the ***External Data*** tab, then click on ***Text File*** in the ***Export*** group to display the ***Export Wizard***

   Exporting to text requires a few extra steps...
3. Click on **[Browse]**, locate and select the course files folder, then click on **[Save]** to set the destination and click on **[OK]**
4. Ensure that ***Delimited*** is selected, then click on **[Next]** to specify the delimiter character
5. Ensure that ***Comma*** is selected as the delimiter, then click on **[Next]**

   We'll use the suggested filename…
6. Click on **[Finish]** to display the ***Save Export Steps*** option in the wizard
7. Ensure that ***Save export steps*** appears without a tick, then click on **[Close]**
8. Close the table



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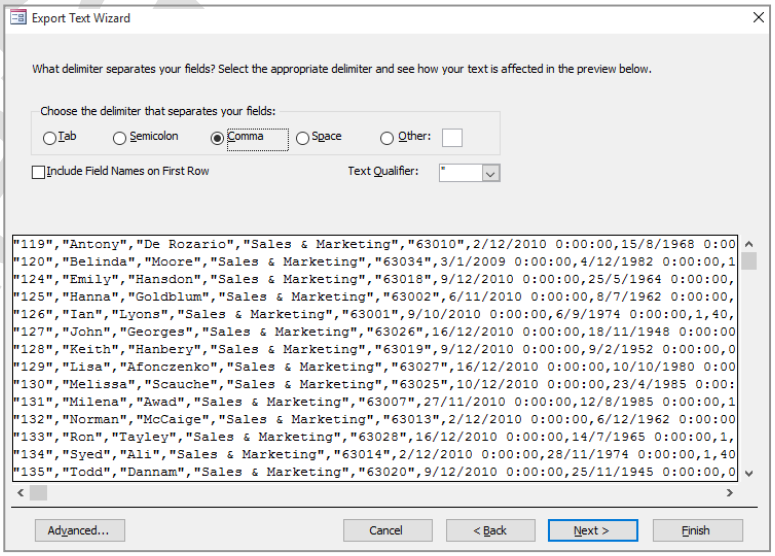


4

For Your Reference…

To ***export records*** to a ***text file format***:

1. Open the table to export
2. On the ***External Data*** tab, click on ***Text File*** in the ***Export*** group
3. Complete the steps in the wizard

Handy to Know…

- There are two types of text files. One type has the data ***delimited*** (enclosed) with quotation marks and separated by commas. The other type is where the data is ***fixed length***. The delimited type, while it sounds more complex, is the one most supported by other applications.

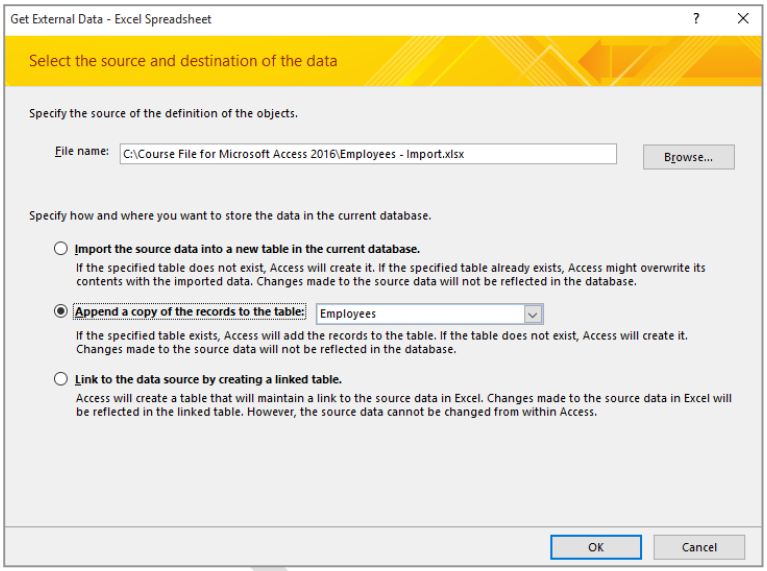
IMPORTING FROM MICROSOFT EXCEL

Importing data from Microsoft Excel is a straightforward process, but there are several more steps than you might expect. This is because Access has to take into account so many of the different nuances in Excel data. The ***Import Wizard*** guides you through the steps, prompting for responses about the Excel data being imported.

Try This Yourself:

Open File *Before starting this exercise you MUST open the file Importing Records_2.accdb…*

1. Click on the ***External Data*** tab, then click on ***Excel*** in the ***Import & Link*** group to start the ***Get External Data*** wizard
2. Click on **[Browse]** to display the ***File Open*** dialog box, then locate and open the course files folder
3. Click on ***Employees – Import.xlsx***, then click on **[Open]**
4. Click on ***Append a copy of the records to the table*** and ensure that ***Employees*** is the selected table
5. Click on **[OK]** to display the ***Import Spreadsheet Wizard*** screen
6. Click on **[Next]** to display the column headings
7. Click on **[Next]** to display the final screen
8. Click on **[Finish]** to display the ***Save Import Steps*** screen, ensure that ***Save import steps*** appears without a tick, then click on **[Close]**
9. Open the ***Employees*** table to view the imported data, then close the table



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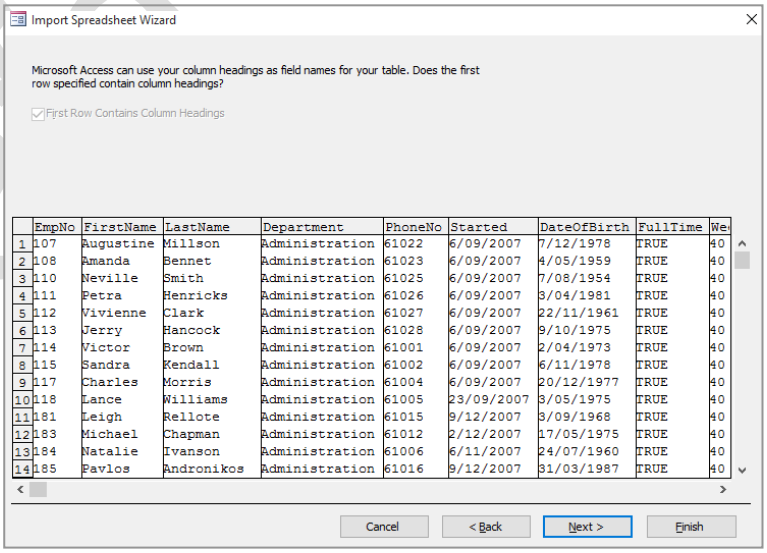


	EmpNo	FirstName	LastName	Department	PhoneNo	Started	DateOfBirth	FullTime	We
1	107	Augustine	Millson	Administration	61022	6/09/2007	7/12/1978	TRUE	40
2	108	Amanda	Bennet	Administration	61023	6/09/2007	4/05/1959	TRUE	40
3	110	Neville	Smith	Administration	61025	6/09/2007	7/08/1954	TRUE	40
4	111	Petra	Henricks	Administration	61026	6/09/2007	3/04/1981	TRUE	40
5	112	Vivienne	Clark	Administration	61027	6/09/2007	22/11/1961	TRUE	40
6	113	Jerry	Hancock	Administration	61028	6/09/2007	9/10/1975	TRUE	40
7	114	Victor	Brown	Administration	61001	6/09/2007	2/04/1973	TRUE	40
8	115	Sandra	Kendall	Administration	61002	6/09/2007	6/11/1978	TRUE	40
9	117	Charles	Morris	Administration	61004	6/09/2007	20/12/1977	TRUE	40
10	118	Lance	Williams	Administration	61005	23/09/2007	3/05/1975	TRUE	40
11	181	Leigh	Rellote	Administration	61015	9/12/2007	3/09/1968	TRUE	40
12	183	Michael	Chapman	Administration	61012	2/12/2007	17/05/1975	TRUE	40
13	184	Natalie	Ivanson	Administration	61006	6/11/2007	24/07/1960	TRUE	40
14	185	Pavlos	Andronikos	Administration	61016	9/12/2007	31/03/1987	TRUE	40

6

For Your Reference…

To ***import data*** from ***Microsoft Excel***:

1. On the ***External Data*** tab, click on ***Excel*** in the ***Import & Link*** group
2. Choose the file to import, then click on **[OK]**
3. Complete the steps of the ***Get External Data*** wizard

Handy to Know…

- When importing data from Excel, Access has to manipulate the data from a 3-dimensional spreadsheet format into a 2-dimensional database format – that is why there are quite a few steps in the import wizard.

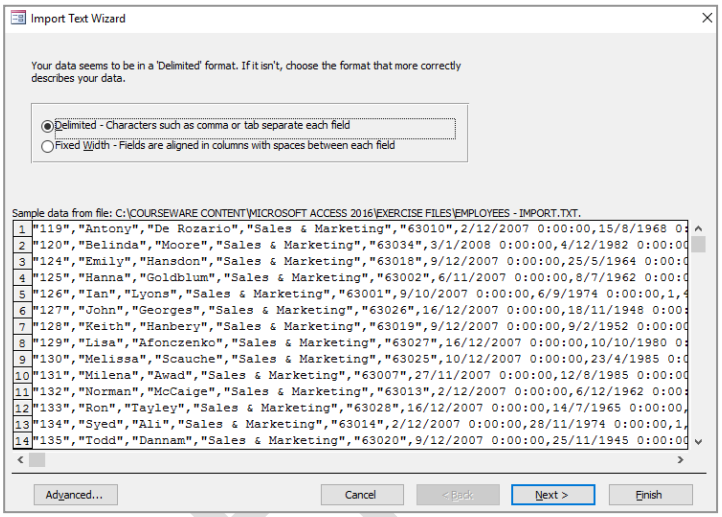
IMPORTING FROM A TEXT FILE

Since text file formats are common in the computer world it is only logical to expect that Access would have routines that allow you to import from text files. When importing data from a text file, Access needs to have specific information about the format of the data and it will prompt you for this information through a series of steps in the ***Get External Data Wizard***.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Importing Records_3.accdb...*

1. Click on the ***External Data*** tab, then click on ***Text File*** in the ***Import & Link*** group to start the ***Get External Data*** wizard
2. Click on **[Browse]** to display the ***File Open*** dialog box, ensure the course files folder is open, then click on ***Employees – Import.txt*** and click on **[Open]**
3. Click on ***Append a copy of the records to the table*** and ensure the ***Employees*** table is selected
4. Click on **[OK]** to display the ***Import Text Wizard*** screen
5. Ensure that ***Delimited*** is selected, then click on **[Next]** to display the delimiters options
6. Ensure that ***Comma*** is selected, then click on **[Next]** to see the final screen
7. Click on **[Finish]** to display the ***Save import steps*** screen, ensure that ***Save import steps*** appears without a tick, then click on **[Close]**
8. Open the table ***Employees*** to see the additional imported records, then close the table



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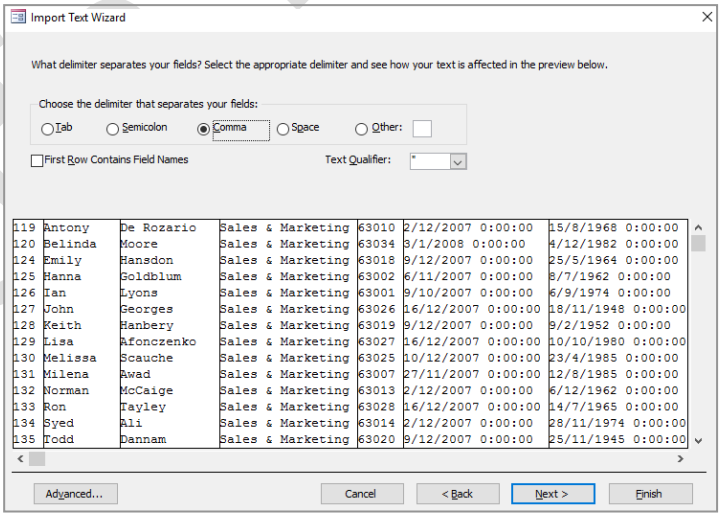

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For Your Reference…

To ***import data*** from a ***text file***:

1. On the ***External Data*** tab, click on ***Text File*** in the ***Import & Link*** group
2. Choose the file to import and click on **[OK]**
3. Complete the steps of the ***Get External Data Wizard***

Handy to Know…

- When importing data, you should always open the table into which the data was imported to ensure that it has been imported correctly.

LINKING TO AN EXTERNAL SOURCE

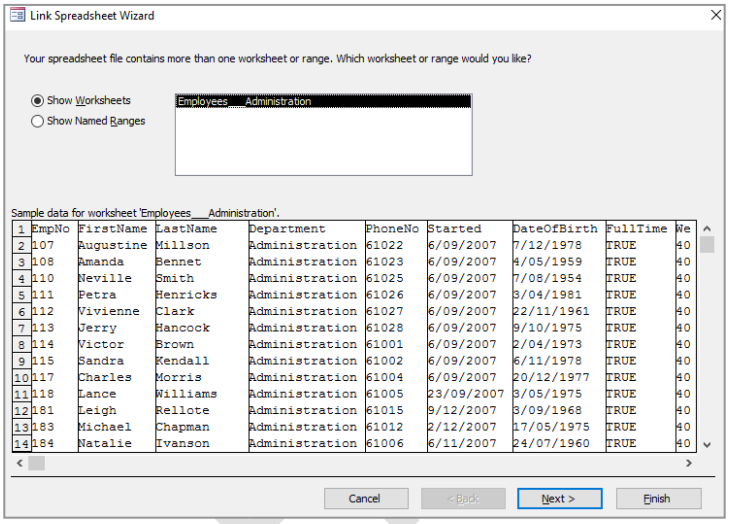
In Access you can elect to ***link to an external data source***. When you do this, the external source appears like a table in the Navigation pane. The linked table can be opened and viewed like any other table, but the data cannot be changed. The advantage of this approach is that the linked table always contains the most recent changes to the external data source.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Importing Records_4.accdb...*

1. Click on the ***External Data*** tab, then click on ***Excel*** in the ***Import & Link*** group, to start the ***Get External Data*** wizard
2. Click on **[Browse]** to display the ***File Open*** dialog box, ensure the course files folder is open, then click on ***Employees – Import.xlsx*** and click on **[Open]**
3. Click on ***Link to the data source by creating a linked table***, then click on **[OK]** to display the ***Link Spreadsheet Wizard*** screen
4. Click on **[Next]** to display the column headings screen
5. Ensure that ***First Row Contains Column Headings*** is selected, then click on **[Next]** to display the final screen
6. Click on **[Finish]**

   A message will display when linking is complete…
7. Click on **[OK]** to see the linked table in the ***Navigation*** pane



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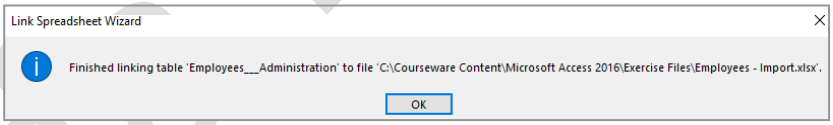

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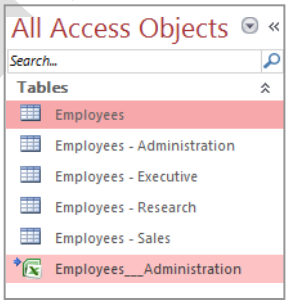


For Your Reference…

To ***create*** a ***link*** to an ***external source***:

- Perform the import in the normal way except choose the ***Link to the data source by creating a linked table*** option on the first screen

Handy to Know…

- There are pros and cons associated with linking to an external data source. Although you always get the latest data, you are restricted in what can be done with it. If you need to import data on a regular basis, use this option, otherwise stick with the straight import routines.

UNDERSTANDING FORMS

Forms are like special templates that you can use to make data, which would normally appear in rows and columns in a table, more presentable on screen. Forms can be used for viewing data on the screen, for editing data, and for adding new data. Forms can be created quickly from scratch, based on an existing table, or by using a special ***Wizard*** that steps you through the process.

Creating Forms

Working with records in tables is not difficult to do. However, opening a table and allowing people to work directly in it can be fraught with problems. They may inadvertently delete records, or corrupt data in fields, and even see some fields of data (such as salary information) that you would prefer they rather did not.

So, instead of providing users with direct access to the data in a table, you can control what they see and what they work with, by giving them access to the data through forms.

Forms themselves do not contain data, but are created as structural ***templates*** into which the data is placed when the form is viewed. The template basically defines *what to display* (e.g. which fields to use), *where to display it* (e.g. where the fields should appear on the page), and *how it should look* (e.g. font size, colour, etc).

When a form is first created it is based on either an existing table or an existing query. You base the form on a table if you wish to report on all of the data, or a query if you wish to view a subset of the data.

The Many Ways of Creating a Form

In Access you can create simple forms or very complex and intricate forms. So, as you'd expect, Access offers several ways for you to create forms. In Access, forms are created using the tools on the ***Create*** tab of the ribbon. Here you can create:

- A basic form using the ***Form*** tool, the ***Split Form*** tool or the ***Multiple Items*** tool – these tools create a form that appears almost instantly and requires very little work on your part, as all of the work is done for you.
- More intricate forms using the ***Form Wizard*** tool – the ***Form Wizard*** metaphorically holds your hand and asks you a series of questions which ultimately, when answered, result in the form being created for you, as specified.
- A complex, elaborate form using either the ***Blank Form*** tool or the ***Form Design*** tool – these options present you with a blank form canvas and you are required to do all of the work to lay out what you want, where you want it, and how it should look. This is the most difficult of the options to use as you have to do everything yourself.

Achieving a Balance

There is no right or wrong way to create forms – choose the method that achieves the results using the least amount of time and effort.

The beauty of the form creation tools in Access is that even after you create a form using any of the techniques above, that form can still be modified and customised to suit specifically what you are after. So even if the basic form doesn't quite provide you with what you want or the ***Form Wizard*** hasn't quite done all it should, you can still change the form design yourself.

Many Access users create their forms initially using the ***Form*** tool, the ***Split Form*** tool or the ***Form Wizard*** tool, and then fine tune the layout or the design to suit their needs.

CREATING A BASIC FORM

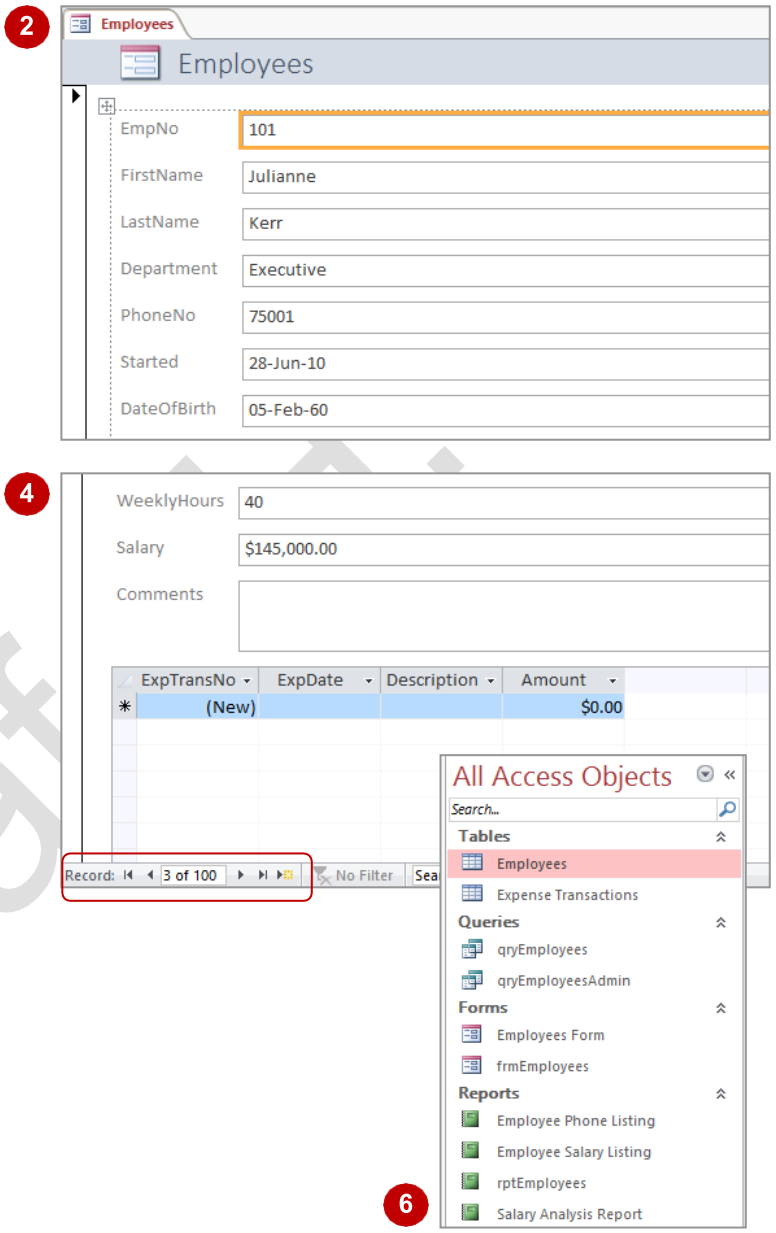
One of the easiest and simplest ways to create a form in Access is to use the ***Form*** tool which is found on the ***Create*** tab of the ribbon. All you need to do is select the table or query upon which to base the form and then click on the tool. This is a good way to get an instant form on the screen for data entry or editing.

Try This Yourself:

Open File *Before starting this exercise you MUST open the file Creating Forms_1.accdb…*

1. In the ***Navigation*** pane, click on the ***Employees*** table to specify the table to use
2. Click on the ***Create*** tab, then click on ***Form*** in the ***Forms*** group

   A form layout will instantly appear. The layout view of the form allows you to make adjustments to the form template…
3. Click on the top half of ***View*** in the ***Views*** group to see the form in ***Form View*** where the data is presented
4. Click on the various ***Record*** buttons in the ***Navigation*** bar at the bottom of the screen to move through the records
5. Click on ***Save*** in the ***QAT*** to display the ***Save As*** dialog box
6. Type **frmEmployees** in ***Form Name*** and click on **[OK]** to save the form
7. Close the form



For Your Reference…

To ***create*** a ***basic form***:

1. Select the table or query in the ***Navigation*** pane
2. Click on the ***Create*** tab, and click on ***Form*** in the ***Forms*** group

Handy to Know…

- When creating a basic form for a table, linked tables will also appear as subdatasheets on the form. Access assumes you want to see the records from lookup tables in a form.

CREATING A SPLIT FORM

Another quick and basic form that you can create in Access is a ***split form***. A split form shows a standard form at the top of the screen, where only one record appears at a time, and a datasheet view at the bottom of the screen. The datasheet shows the records in a table format. Each time you click on a record in the datasheet, the fields for that record appear in the top form.

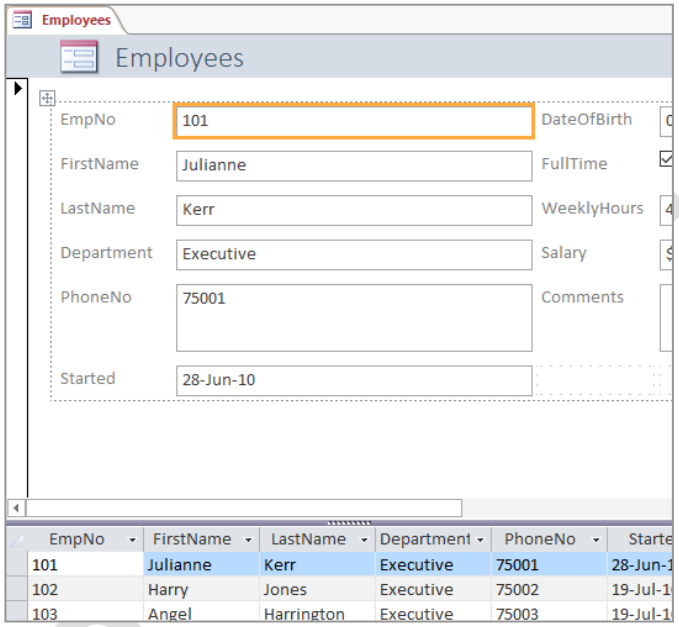
Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Creating Forms_2.accdb...*

1. In the ***Navigation*** pane, click on the ***Employees*** table
2. Click on the ***Create*** tab, then click on ***More Forms*** in the ***Forms*** group and select **Split Form**

   A split form layout will instantly appear…
3. On the ***Form Layout Tools: Design*** tab, click on ***View*** in the ***Views*** group to see the form in ***Form View***
4. Click on the record buttons in the ***Navigation*** bar
5. Click on the record for ***EmpNo 108*** (Amanda Bennet) to display the details in the top form
6. Click on ***Save*** in the ***QAT*** to display the ***Save As*** dialog box
7. Type **frmEmployeesSplitForm** in ***Form Name*** and click on **[OK]**
8. Close the form

2



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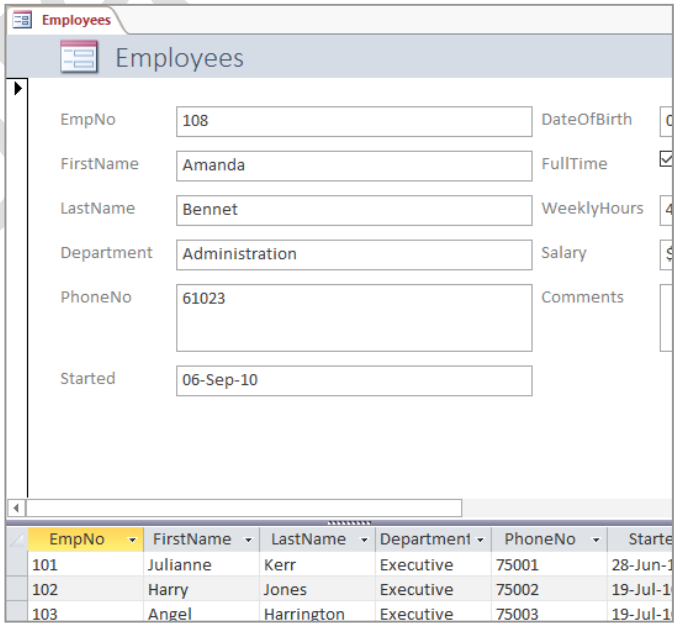


For Your Reference…

To ***create*** a ***split form***:

1. In the ***Navigation*** pane, select the table or query
2. Click on the ***Create*** tab, then click on ***More Forms*** in the ***Forms*** group and select **Split Form**

Handy to Know…

- Linked tables do not appear in a split form. This is because there is already a datasheet in the bottom part of the window.

BINDING A FORM TO A QUERY

The attachment of a table or query to a form is known as ***data binding***. One of the strengths of Access is that both forms and reports can be based on either a full table of data or a subset of the table known as a ***query***. When a form is bound to a query, the query is run first to extract matching fields and records, and then presented in the form much the same as a full table would be.

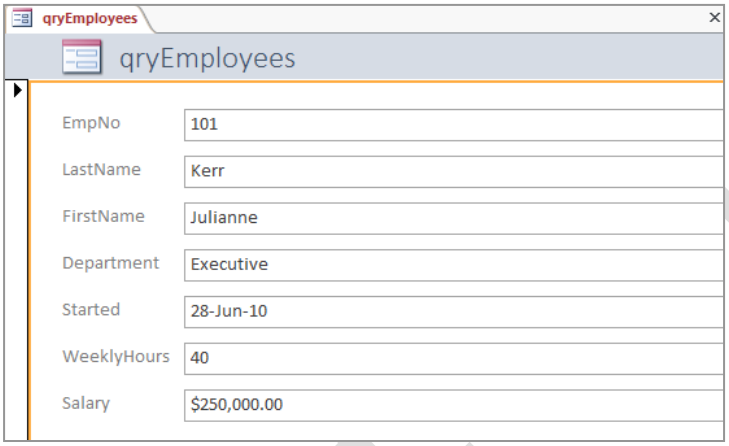
Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Creating Forms_3.accdb...*

1. In the ***Navigation*** pane, click on ***qryEmployees*** to specify the query to use
2. Click on the ***Create*** tab, then click on ***Form*** in the ***Forms*** group

   Only the fields specified in the query will appear in the form layout…
3. On the ***Form Layout Tools: Design*** tab, click on ***View*** in the ***Views*** group to see the form in ***Form View*** where the data is presented
4. Click on ***Save*** in the ***QAT*** to display the ***Save As*** dialog box
5. Type **frmEmployeeSalary** in ***Form Name*** and click on **[OK]** to save the form
6. Close the form

   The new form will appear in the Navigation pane



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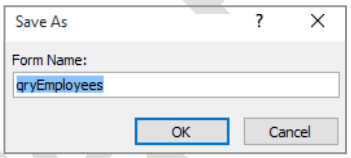
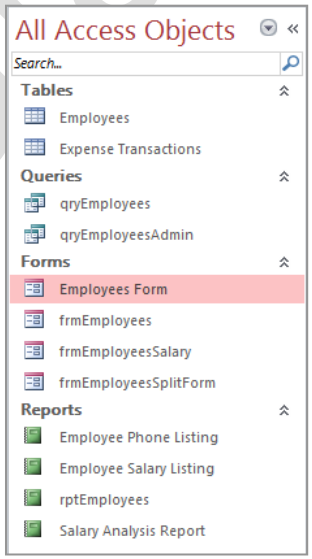




For Your Reference…

To ***create*** a ***form from*** a ***query***:

1. In the ***Navigation*** pane, click on the query
2. Click on the ***Create*** tab, then click on ***Form*** in the ***Forms*** group

Handy to Know…

- You can create a form from a query using ***Split Form*** and ***Multiple Item***.
- Unlike a form based on a table, a form based on a query does not show the transactional records in the form.

USING THE FORM WIZARD

To have more say in what to include in your form and how it should look, you can create a form using the ***Form Wizard***. The ***Form Wizard*** will walk you through the steps to create a new form.

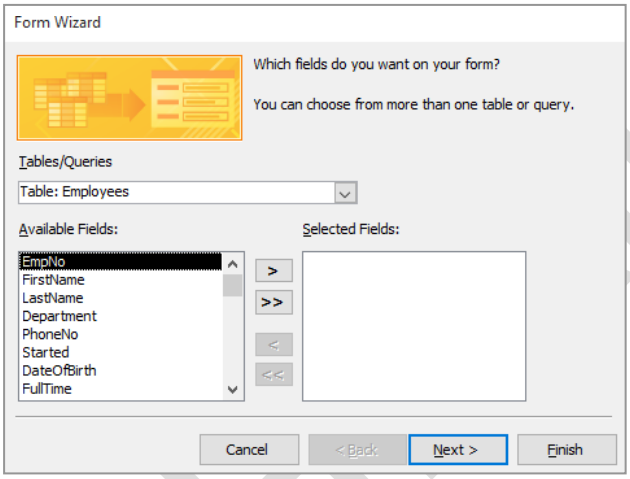
The ***Form Wizard*** is made up of several screens, each of which requires you to specify what fields to include, how it should look, and what the new form should be called.

Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Creating Forms_4.accdb...*

1. In the ***Navigation*** pane, click on the ***Employees*** table
2. Click on the ***Create*** tab, then click on ***Form Wizard*** in the ***Forms*** group to start the wizard
3. Double-click on ***EmpNo***, ***FirstName***, ***LastName***, ***Department*** and ***PhoneNo*** to add them to the ***Selected Fields*** list
4. Click on **[Next]** to proceed to the next screen, then continue working through the screens using the settings as shown
5. Once you have specified the title in the last screen of the wizard, click on **[Finish]** to build the form
6. Close the form

2



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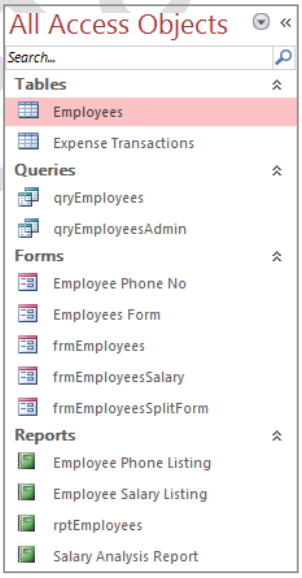
Screen	Settings	Click on...
Layout	Columnar	**[Next]**
Title	Employee Phone No	

5



For Your Reference…

To ***create*** a ***form using*** the ***Form Wizard***:

1. Click on the table or query
2. Click on the ***Create*** tab, then click on ***Form Wizard*** in the ***Forms*** group
3. Complete the steps of the ***Wizard***

Handy to Know…

- When using the ***Form Wizard***, if you have made a mistake in any of the ***Wizard*** screens or would simply like to review your work, click on **[Back]** to move back through previous screens.

WORKING WITH EXISTING FORMS

Once forms have been created they are ready for use. Forms are generally used either to provide access to the records and data for editing or just simply to search and view data. When you open a form from the ***Navigation*** pane, it is opened in ***Form View*** where it is ready for action. There are also several other views that you need to be aware of when working with forms.

Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Creating Forms_5.accdb...*

1. In the ***Navigation*** pane, double-click on ***frmEmployees*** to open the form in ***Form View***

   This is the view where you can edit the data…

2. On the ***Home*** tab, click on ***View*** in the ***Views*** group to see the form in ***Layout View***

   In this view you can make changes to the layout of the form, including changing column widths, colours, etc…

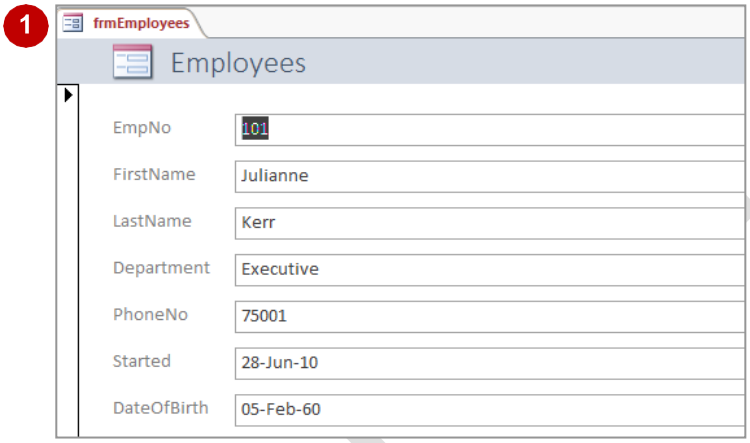
3. Click on ***View*** to return to ***Form View***

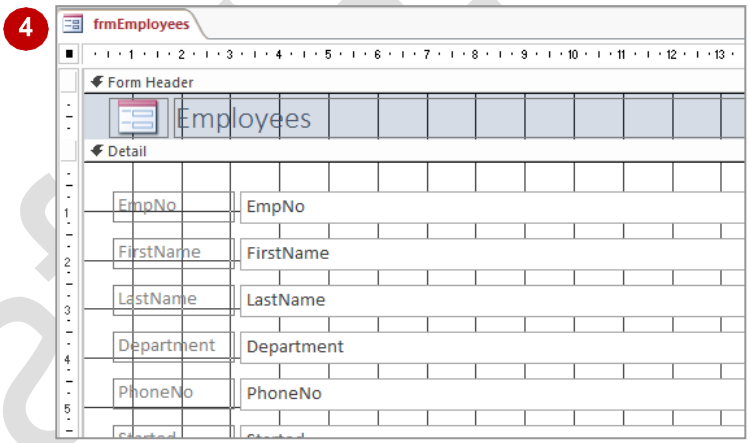
4. Click on the bottom half of ***View*** and select **Design View** to see the form design

   This is a more sophisticated design area of the form…

5. Click on the ***Home*** tab, then click on ***View*** to switch back to ***Form View***

6. Close the form





For Your Reference…

To ***change*** the ***views*** of a ***form***:

1. Open the form in any view
2. Click on the bottom half of ***View*** and click on the desired view

Handy to Know…

- Changes to a form's structure are done in either ***Layout*** or ***Design*** views. ***Layout*** view provides a view of the form with data in place. ***Design*** view provides access to more of the detailed areas of the form such as the header and footer.

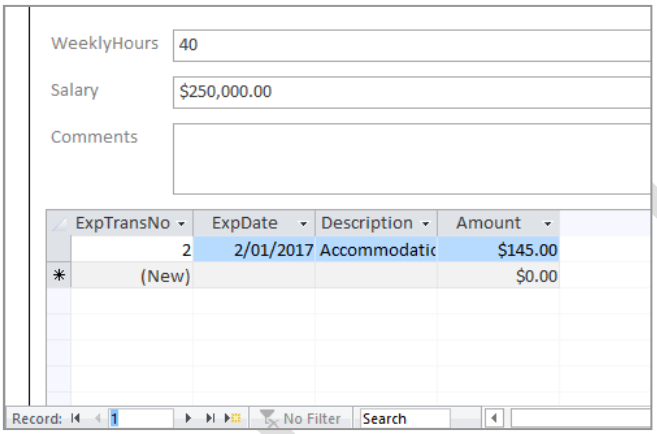
EDITING RECORDS IN A FORM

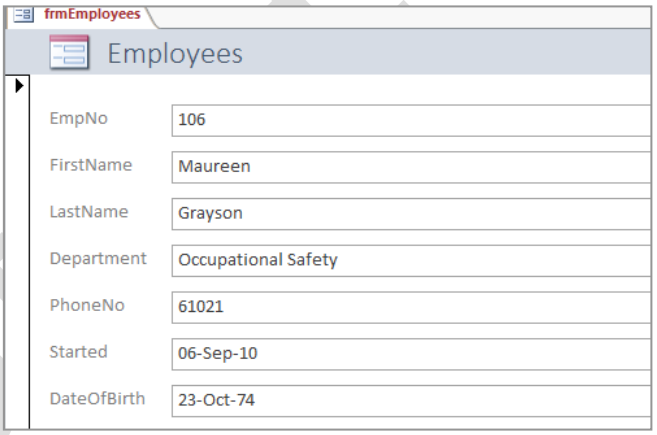
Forms are really intended to make working with the data in a table easier by providing better and hopefully more intuitive access to the data in the records. Forms therefore provide an alternative to working in a table and virtually any editing changes you can make to the data in the table can also be made to the data when it appears in a form.

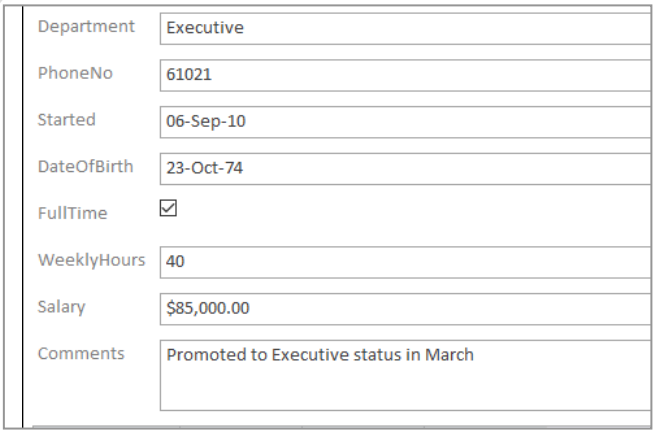
Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Creating Forms_5.accdb...*

1. In the ***Navigation*** pane, double-click on ***frmEmployees*** to open the form in ***Form View***
2. Click and drag over the current record number in the ***Navigation*** bar at the bottom of the screen to select it
3. Type **6** and press Enter to move to ***EmpNo 106*** (Maureen Grayson)
4. Click and drag over ***Occupational Safety*** in the ***Department*** field and type **Executive**
5. Click in ***Comments*** and type **Promoted to Executive status in March.**
6. Click on ***Next record*** to save the changes, then click on ***Previous record*** to return to Maureen's record to see the change
7. Close the form







For Your Reference…

To ***edit*** a ***record through*** a ***form***:

1. Open the form, then locate the record to edit
2. Make the changes as required and move to another record to save the changes

Handy to Know…

- You can move back through the fields on a form by pressing Shift + Tab
- When you edit a record in a form, the ***edit*** icon will appear in the top left corner of the record in the form window.

DELETING RECORDS THROUGH A FORM

Forms can be used to delete records from a table. The first step is to locate the record that you want to delete. The deletion process is permanent – once a record has been removed it cannot be restored. If you are at all unsure about removing records, you should make a backup copy of the database before you start deleting.

Try This Yourself:

Same File

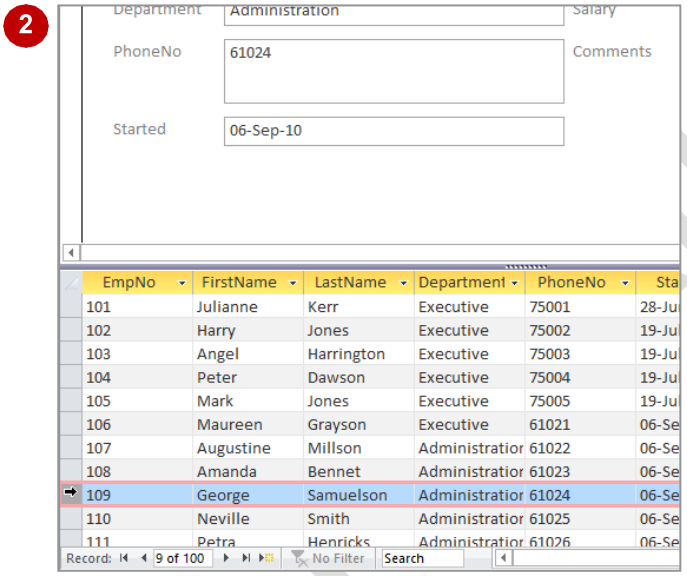
Continue using the previous file with this exercise, or open the file Creating Forms_6.accdb...

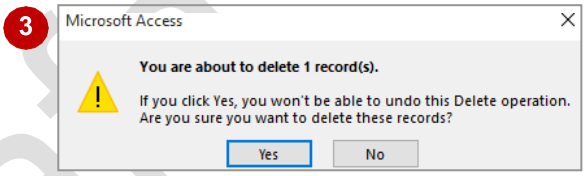
1. Double-click on ***frmEmployeesSplitForm*** to open the form in ***Form View***
2. In the datasheet, at the bottom of the form, locate and click to the left of the record for ***George Samuelson*** (EmpNo ***109***)

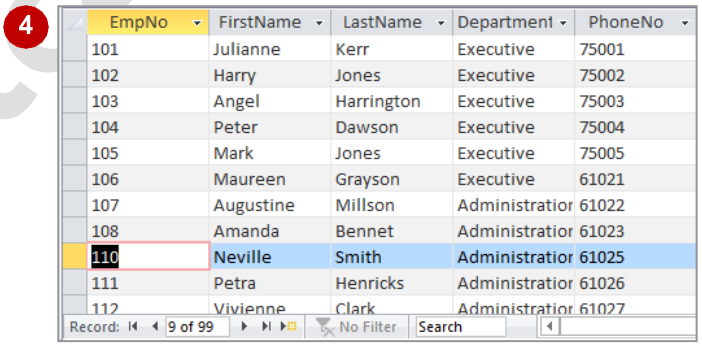
   Clicking to the left selects the record and activates the Delete tool in the ribbon…
3. On the ***Home*** tab, click on ***Delete*** in the ***Records*** group

   You will be asked to confirm the deletion…
4. Click on **[Yes]** to delete the record

   The record is gone…
5. Close the form







For Your Reference…

To ***delete*** a ***record using*** a ***form***:

1. Open the form in ***Form View***
2. Locate and select the record
3. On the ***Home*** tab, click on ***Delete*** in the ***Records*** group
4. Click on **[Yes]**

Handy to Know…

- When deleting records through a form, the records are deleted from the table, not the form. No matter which form is opened, the record will no longer be there because it no longer exists in the table.

DELETING AN UNWANTED FORM

Forms, like reports, are database objects that exist as templates for displaying and working with records in a table or query. They can be created with relative ease and therefore you will find that you create quick, minimal usage forms for convenience. Fortunately, you can delete unwanted forms even faster than creating them.

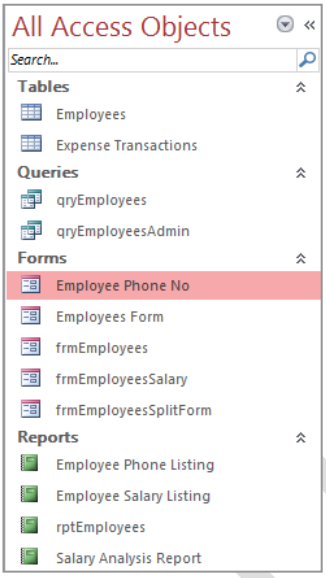
Try This Yourself:

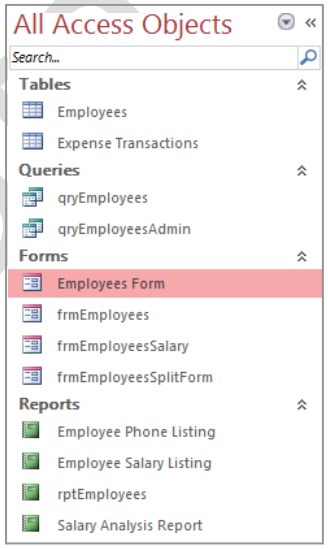
Same File

Continue using the previous file with this exercise, or open the file Creating Forms_7.accdb...

1. In the ***Navigation*** pane, click on the ***Employee Phone No*** form to select it
2. On the ***Home*** tab, click on ***Delete*** in the ***Records*** group

   A warning about permanently deleting a form will appear, and you will be asked to confirm your intentions…
3. Click on **[Yes]** to permanently delete the form





For Your Reference…

To ***delete*** a ***form***:

1. In the ***Navigation*** pane, click on the form to select it
2. Click on the ***Home*** tab, then click on ***Delete*** in the ***Records*** group
3. Click on **[Yes]**

Handy to Know…

- It is always a good idea to make a backup copy of the database file (e.g. using ***File Explorer***) before deleting objects such as reports, queries and forms from the file.

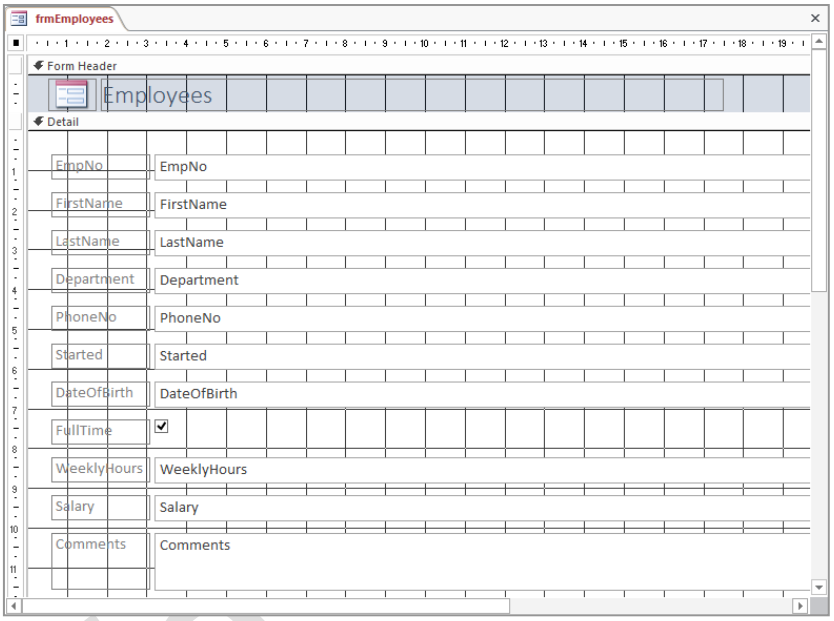
UNDERSTANDING FORM DESIGN AND LAYOUT

Although you can create your own forms completely from scratch, it would be a very laborious process. Even seasoned Access programmers rely on the form creation tools to create a starting form and then adapt and modify that to suit their specific requirements. While modifying a form is not difficult, there are several conceptual aspects you should understand first.

Forms are Templates

While the word ***template*** has many different and sometimes specific connotations in computing, it does provide a good way to describe what a form really is. A ***form*** is simply a *template* with ***objects*** on it that determine what should appear on the screen, where it should appear, and how it should look.

Everything on a form is an object, including the heading, logos, data placeholders, even the background.



Objects on the Form

Every object on the form, including the form itself (which is an object), has ***properties*** that determine how the object should look (*format*), what it should contain (*data*), and how it should behave (*event*).

A special type of object known as a ***control*** is used to display data from a table, query or *expression* (formula) in a form. Controls can be ***bound*** to a data source (such as a *field* from a table), or can be ***unbound*** and appear with static information (such as a heading) or dynamic, changeable information (such as the current date).

So, when you modify a form, you do so by playing around with the objects on the form – resizing them, adding more of them, deleting unwanted ones, changing their colours or fonts, etc.

The Three Form Views

There are three ways to view a form. When you double-click on a form in the ***Navigation*** pane you will ***run*** the form. When the form is running, data from the data source (e.g. table or query) is merged into the controls on the form template and displayed on the screen. This is the view that the users of your database will employ to see their data.

There are also two views that allow you to modify the form – ***Layout View*** and ***Design View***. With both of these views you can move objects around and change properties so that objects look and behave the way you want.

Layout View is more like a layout *preview*. In ***Layout View*** your controls appear with data in them just as they would if the form was running. You can modify the controls, move them around, resize them, recolour them, and see exactly how they will appear when the form is run because they already contain data – from the first record.

In ***Design View*** you can do most of the changes to layout and appearance that you can in ***Layout View***, plus you can add controls and finely adjust all of the control settings. In ***Design View*** you see the names of the controls, not the actual data, and you also see the structure of the form such as its header area, body area, and footer area.

SWITCHING BETWEEN FORM VIEWS

Access provides two views in which modifications to a form can be made: ***Layout*** view and ***Design*** view. Both of these are available from a shortcut menu when you right-click on a form in the ***Navigation*** pane, or they can be switched while the form is open using the ***View*** tool on the ribbon. While both views allow you to make changes to a form, there are subtle differences.

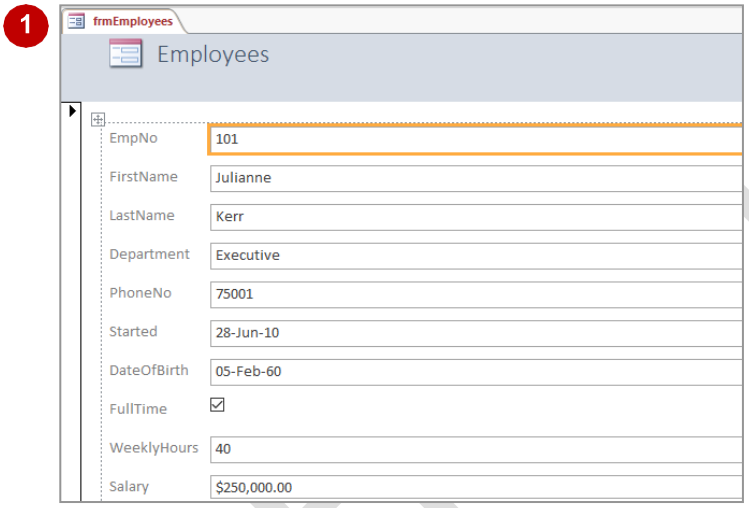
Try This Yourself:

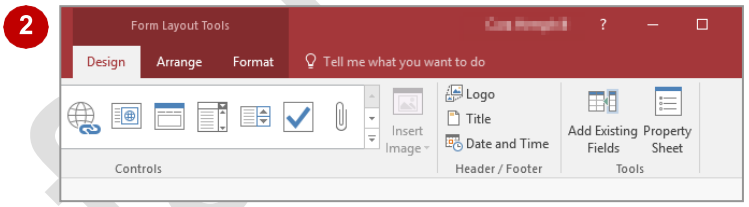
Open File

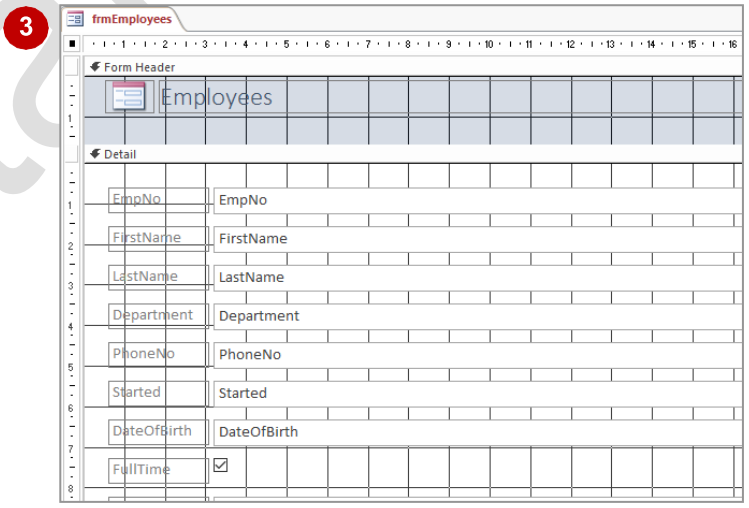
Before starting this exercise you MUST open the file Modifying Forms_1.accdb…

1. In the ***Navigation*** pane, right-click on ***frmEmployees*** and select **Layout View** to open the form in ***Layout View***
2. Spend a few moments studying the options on the three ***Form Layout Tools*** tabs
3. On the ***Form Layout Tools: Design*** tab, click on the bottom half of ***View*** in the ***Views*** group and select **Design View** to see the form in ***Design View***
4. Spend a few moments studying the options now available on the three ***Form Design Tools*** tabs

   Many of the options will only be available when an object or a control on the form is selected …
5. Close the form







For Your Reference…

To ***switch between form views***:

1. Click on the bottom half of ***View*** in the ***Views*** group
2. Select either **Design View** or **Layout View**

Handy to Know…

- It is recommended that you use ***Layout View*** to make changes to the formatting and layout of controls on a form, and ***Design View*** when making changes to the structure of a form such as inserting more controls or adding a form footer.

SELECTING FORM OBJECTS

Everything you see on a form, including the form itself, is an ***object***. In both ***Design View*** and ***Layout View*** you need to select the object that you intend to work with before you can do anything with it. Selecting an object is usually as simple as clicking on it with the mouse. Once selected, an object will appear with a coloured border to indicate it is the ***current*** object.

Try This Yourself:

Same File

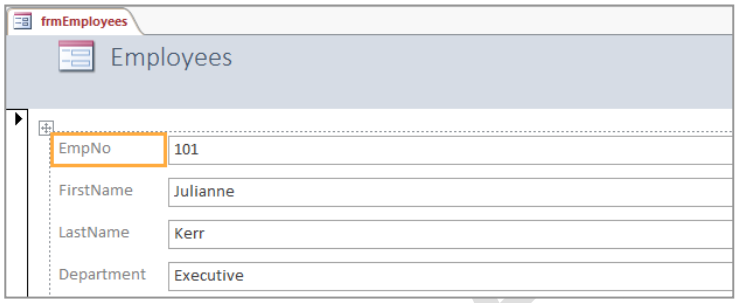
Continue using the previous file with this exercise, or open the file Modifying Forms_1.accdb...

1. Open ***frmEmployees*** in ***Layout View***
2. Click on ***EmpNo*** to select the label control
3. *An orange border indicates that the object is selected…*

   Click on ***101*** to select the text box control
4. Click on ***EmpNo***, then hold down Ctrl and click on ***FirstName*** and ***Executive*** to select the three controls
5. Click on the four-headed arrow icon at the top left of ***EmpNo*** to select all of the controls in this control stack

   A control stack is an object that is made up of a group of objects...
6. Click in the white area of the form to select the form background
7. Click on ***Employees*** in the heading to select it
8. Close the form

2



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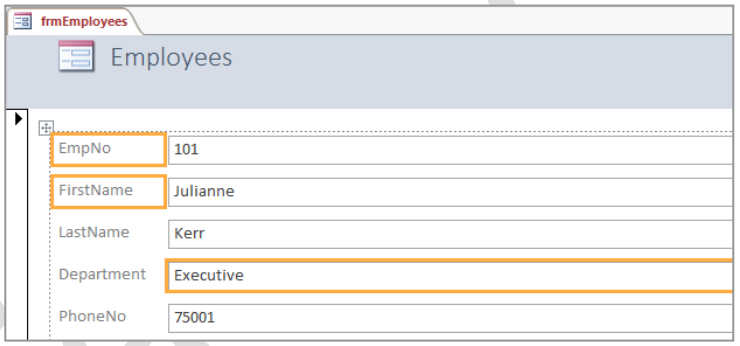

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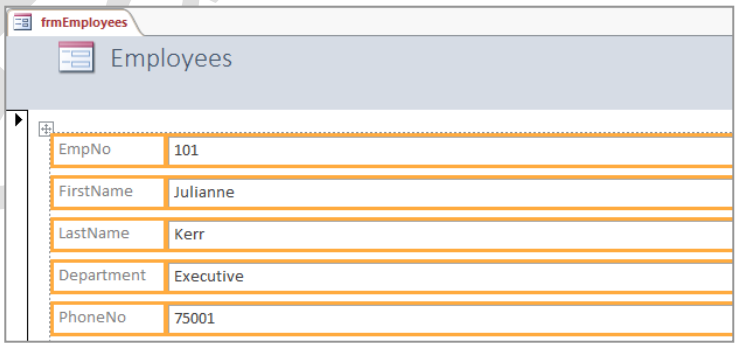

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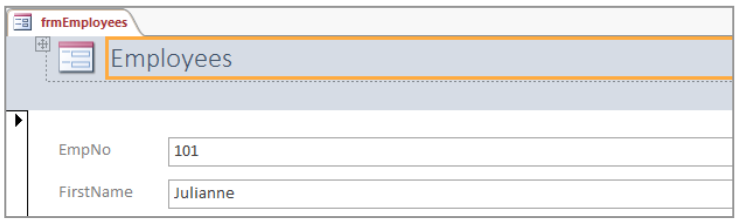


For Your Reference…

To ***select*** an ***object*** on a ***form***:

1. Click on the desired object until it appears with a selection border
2. Hold down Ctrl and click on subsequent objects to select multiple (non-contiguous) objects

Handy to Know…

- Each object on a form has its own set of ***properties*** that control how it looks and behaves. An object needs to be selected before it is possible to access its properties.

WORKING WITH A CONTROL STACK

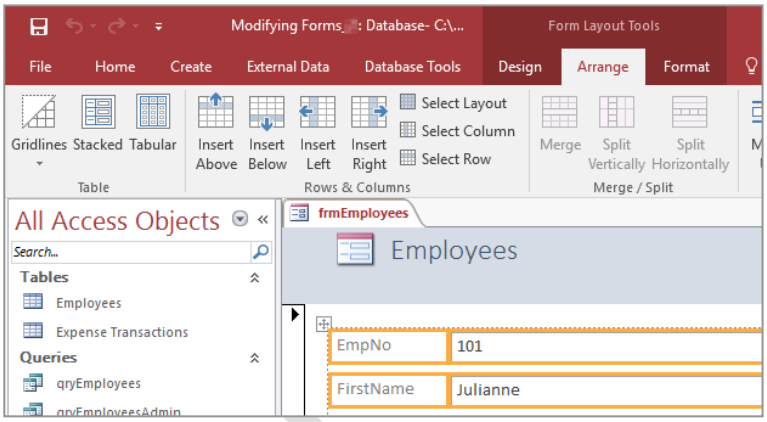
When a form is created in Access, bound controls used for fields from a table or query are often placed into a ***stack***. A stack is simply a way of grouping controls together so that they can be easily moved, resized and consistently spaced. A control is part of a stack when a dotted line appears around it and a four-headed arrow appears at the top left of the lead control.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_1.accdb...*

1. Open ***frmEmployees*** in **Layout View**
2. Click on ***EmpNo***, click on the ***Form Layout Tools: Arrange*** tab, then click on ***Select Layout*** in the ***Rows & Columns*** group to select all controls in this control stack

   You can also click on the four-headed arrow at the top left of the stack…
3. Press → three times to move the stack right three positions
4. Press ← three times to move the stack left three positions
5. Click on ***Salary*** to select this control
6. On the ***Form Layout Tools: Arrange*** tab, click on ***Select Row*** in the ***Rows & Columns*** group
7. Click on ***Move Down*** in the ***Move*** group to move the row down below ***Comments***
8. Press Del to delete the row
9. Save and close the form



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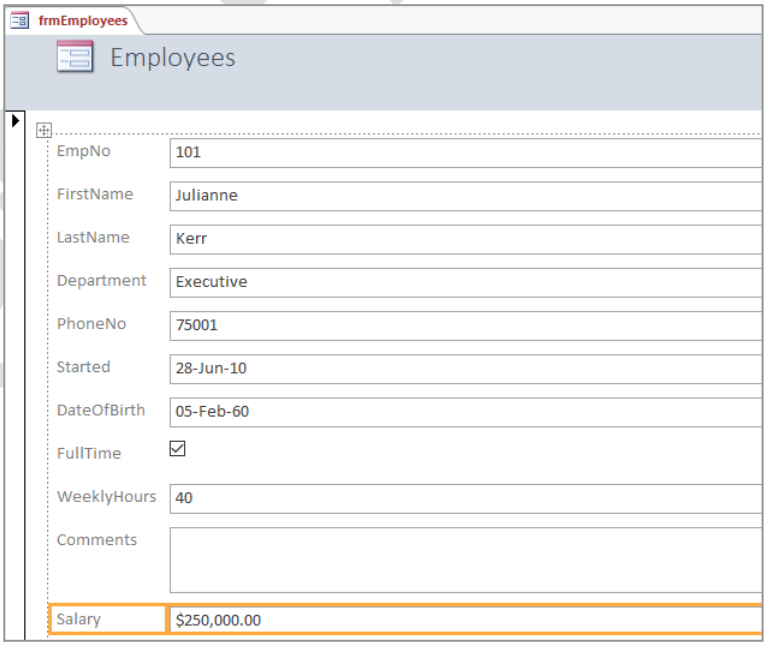

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For Your Reference…

To ***work*** with a ***stack***:

1. Click on a control to select it
2. On the ***Form Layout Tools: Arrange*** tab, click on ***Move Down*** in the ***Move*** group to move the field in the stack, or

   Press Del to delete the control

Handy to Know…

- On a form, when you delete a control from a stack, the other controls below will be moved up to ensure the stack stays together.
- When working with a control stack on a form, you can click on ***Move Up*** (on the ***Form Layout Tools: Arrange*** tab) to move controls up in the stack.

CHANGING CONTROL WIDTHS

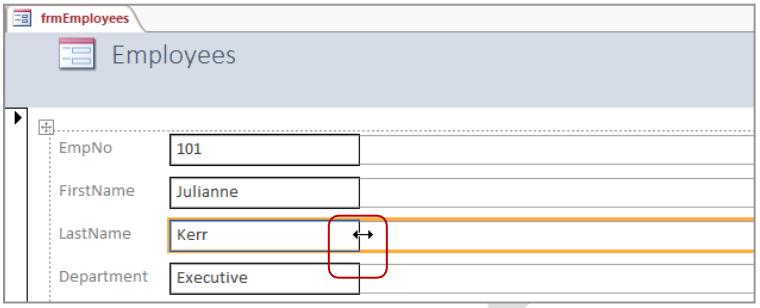
When a form is created using the various generation tools, the width of the controls is often made the same. One of the first tasks when modifying a form is to alter the control widths to more accurately reflect the data that will appear in the control. Control widths are changed by dragging their borders, although a degree of complexity is added if the control is part of a stack.

Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Modifying Forms_2.accdb...*

1. Open ***frmEmployees*** in ***Layout View***
2. Click on ***Kerr*** to select the ***LastName*** control
3. Point to the right border until it changes to a double-headed arrow, hold down the left mouse button, then drag to the left until the field (and the stack) is about one third of its original size
4. Release the mouse button to complete the resize

   The subform is also resized, but we'll fix that in the next exercise…
5. Right-click on the ***Comments*** label and select **Select Entire Row**
6. Right-click on the ***Comments*** label again, then point to **Layout** and select **Remove Layout** to remove the field from the stack
7. Click on the blank ***Comment*** box, then drag the right border to the right until the box is about twice its size
8. Save and close the form



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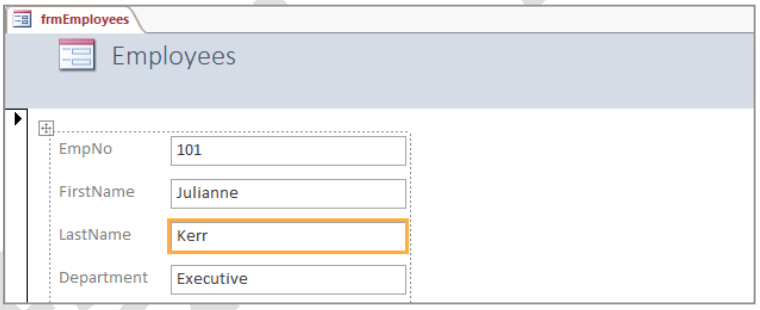

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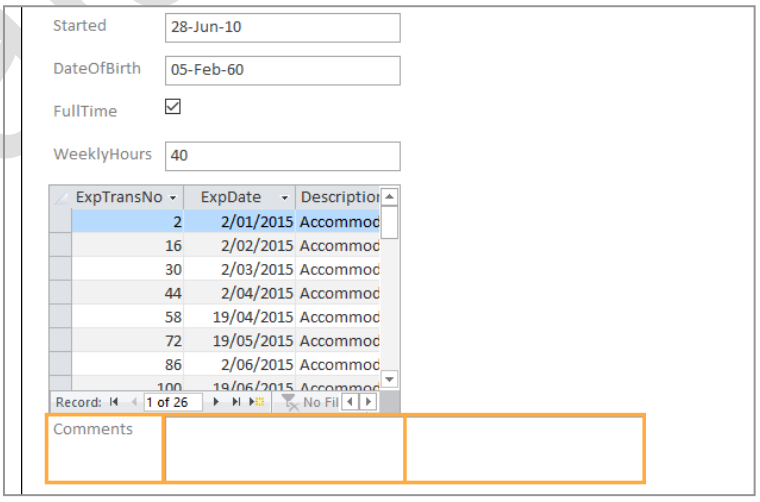

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For Your Reference…

To ***change control widths***:

1. Point to the appropriate border
2. Click and drag the border to the left or the right to resize the control

Handy to Know…

- In a form, when you remove selected controls from a control stack, they may appear obscured by the controls still in the stack. While the removed controls are still selected, it is best to move them to another position – it may be easier to use the arrow keys on the keyboard.

MOVING CONTROLS ON A FORM

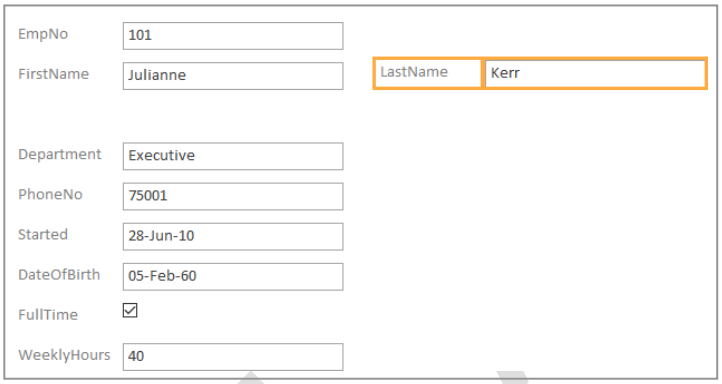
A control stack manages not only the size of a control but also where it is placed relative to the other controls. As the name suggests, controls in a stack are placed on top of one another. If this positioning is not desirable you will need to break the stack by removing the controls from it and then move those controls to another position on the form.

Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Modifying Forms_3.accdb...*

1. Open ***frmEmployees*** in ***Layout View***
2. Click on the four-headed arrow icon at the top left of ***EmpNo*** to select the control stack
3. Right-click on any of the selected controls, then point to **Layout** and select **Remove Layout** to remove all of the controls from the stack

   The four-headed arrow icon now disappears…
4. Click in a blank area to deselect all controls, click on ***LastName***, then hold down Ctrl and click on ***Kerr*** to select both objects
5. Point to the selection until the pointer becomes a four-headed arrow, then click and drag the control into position as shown
6. Repeat steps ***4*** and ***5*** to move the other controls as shown
7. Click on the subform to select it, then click and drag the right border to align it with the right edge of the ***Comments*** box
8. Save and close the form



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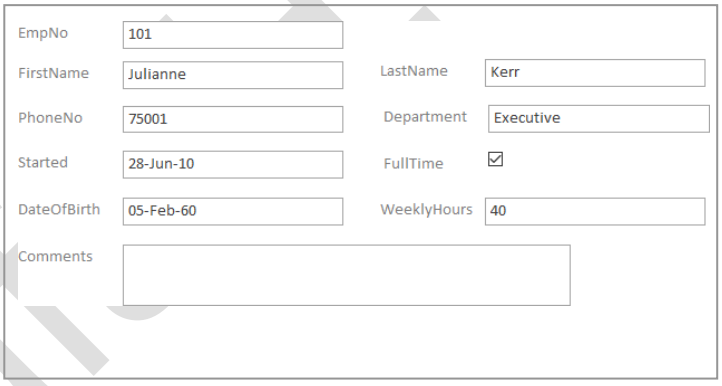

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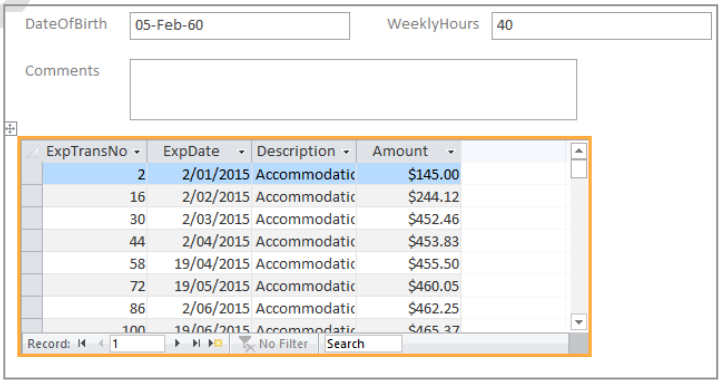

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For Your Reference…

To ***move*** a ***control***:

1. Click on the control to select it
2. Point to the control
3. Hold down the left mouse button and drag the control to the desired location

Handy to Know…

- To move a control stack on a form, drag the four-headed arrow icon to the desired location.
- On a form, selected controls might be easier to move using the arrow keys on the keyboard.

ALIGNING CONTROLS

Once you start moving controls around a form you will realise just how difficult it can be to align them again. If you attempt to ***align controls*** using the mouse and just your eye, you need good co-ordination and patience. Fortunately, there are a series of ***Alignment*** tools on the ***Arrange*** tab on the ribbon that make aligning controls easy.

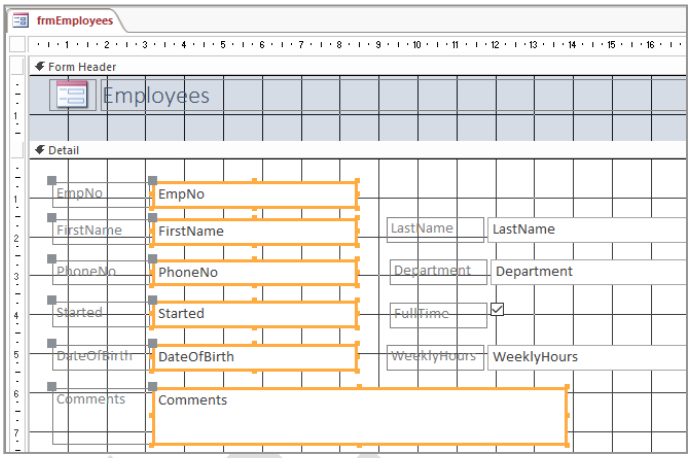
Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_4.accdb...*

1. Open ***frmEmployees*** in ***Design View***
2. Hold down Ctrl and click on the controls as shown to select them
3. Click on the ***Form Design Tools: Arrange*** tab, then click on ***Align*** in the ***Sizing & Ordering*** group and select **Left** to align the controls along their left edges
4. Click on ***FirstName***, then hold down Ctrl and click on the other controls in the row, as shown
5. On the ***Form Design Tools: Arrange*** tab, click on ***Align*** in the ***Sizing & Ordering*** group, then select **Bottom** to align the controls horizontally
6. Using the above steps, align the ***EmpNo*** column of labels to the left, the ***LastName*** column of labels to the left, and each horizontal row to the bottom

   Use the arrow keys to space controls horizontally, if needed…
7. Save and close the form

2



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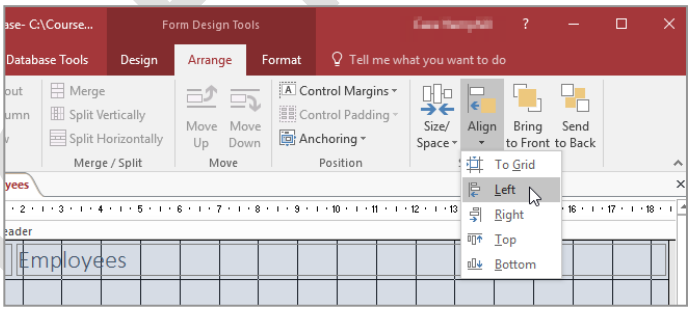
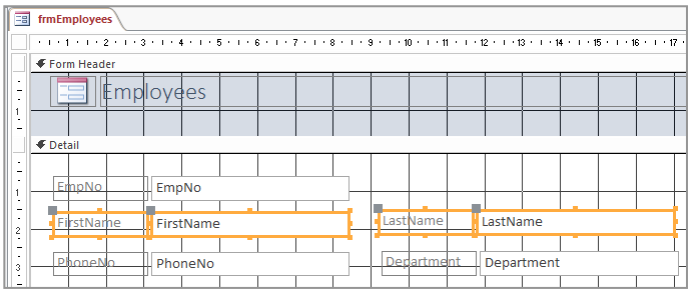


4



For Your Reference…

To ***align controls***:

1. Select two or more controls that need to be aligned to one another
2. On the ***Form Design Tools: Arrange*** tab, click on ***Align*** in the ***Sizing & Ordering*** group then select the appropriate alignment option

Handy to Know…

- When aligning controls on a form, if you want to align the text within the control use the ***Align Text*** tools in the ***Font*** group on the ***Format*** tab.

UNDERSTANDING PROPERTIES

Everything on a form, including the form itself, is an ***object*** and all objects have specific ***properties*** that can be modified. Some objects have only a handful of properties while others may have hundreds. Properties of an object control the way it looks, the way it behaves, and what it actually does.

Accessing Object Properties

In Access there are usually multiple ways to achieve the same end result, especially when it comes to properties and the way they are accessed. For example, when you change the font in a control the most obvious way to do this is to use the commands on the ribbon. However, when you use these commands to change the way an object looks or behaves, you are really changing specific properties of that object. Rather than searching for the right command, it is often easier to display the ***Property Sheet*** pane and adjust the settings using the relevant property.

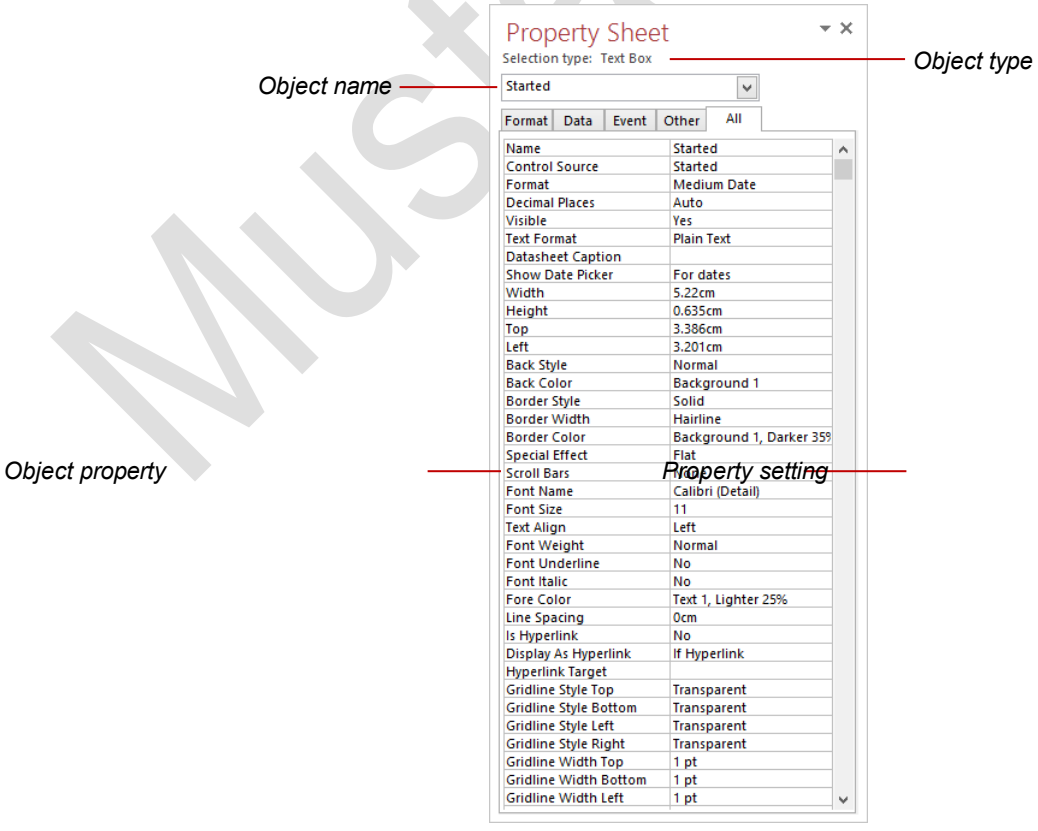
Understanding the Property Sheet Pane

The ***Property Sheet*** pane displays the properties of the object that is currently selected in the form. If no object is selected then the properties of the form itself are displayed.

The ***Property Sheet*** pane consists of five tabs that each display different settings. There are four separate tabs (***Format***, ***Data***, ***Event***, and ***Other***) and a fifth tab which displays the settings from ***All*** of the tabs:

- the ***Format*** tab displays settings pertaining to the way the control appears (colour, height, font, etc.)
- the ***Data*** tab contains settings linking the object to a data source, where relevant (e.g. the field in a table)
- the ***Event*** tab contains settings which determine how that object will behave (e.g. when it is clicked or changed)
- the ***Other*** tab includes settings that don't fit into the other 3 tabs.

The ***Property Sheet*** pane contains a wealth of information about the object currently selected.



CHANGING LABEL CAPTIONS

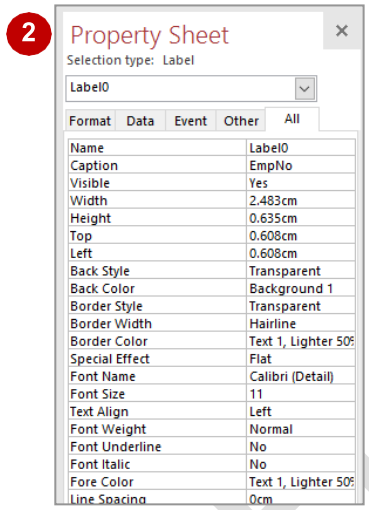
Fields from a data source such as a table or query are represented by a pair of controls in the form – one is a ***label*** control which shows the caption of the field, and the other is usually a ***text box*** control which shows the data from the field when the report is run or in ***Layout View***. The caption in the label is often written in a way that may be cryptic or confusing to a user.

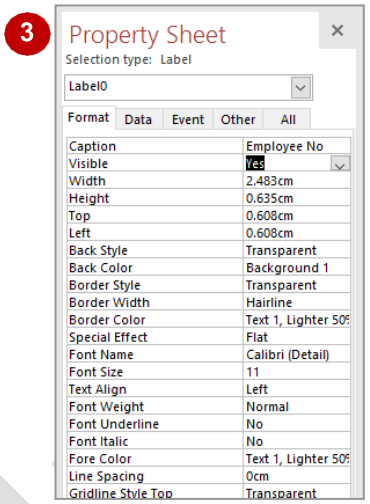
Try This Yourself:

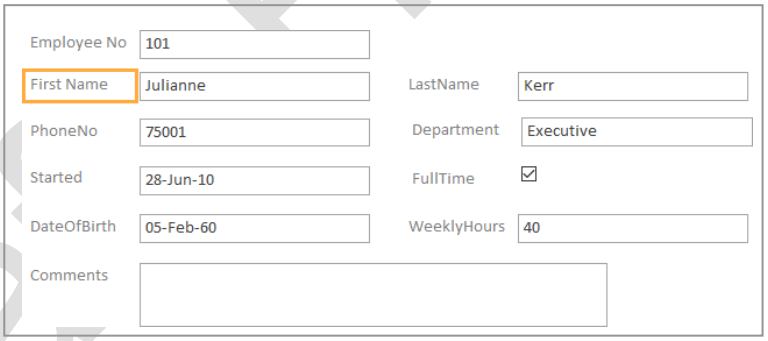
Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_5.accdb...*

1. Open ***frmEmployees*** in ***Layout View***
2. Click on ***EmpNo,*** then on the ***Form Layout Tools: Design*** tab, click on ***Property Sheet*** in the ***Tools*** group to display the ***Property Sheet*** pane
3. In the ***Property Sheet*** pane, click on the ***Format*** tab, double-click on ***EmpNo*** in the ***Caption*** property to select it, then type **Employee No** and press Enter
4. Click on ***Close*** in the top right corner of the ***Property Sheet*** pane to close the pane

   You can also edit a caption directly...
5. Click on ***FirstName***, then double-click to select the text
6. Type **First Name**, then press Enter
7. Change the other captions as shown
8. Save and close the form







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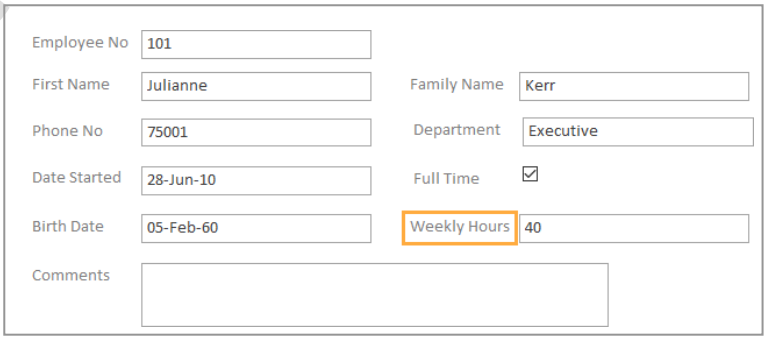


7

For Your Reference…

To ***change label captions***:

1. Click on the object to select it
2. On the ***Form Layout Tools: Design*** tab, click on ***Property Sheet*** in the ***Tools*** group, then click on the ***Format*** tab
3. Change the text in the ***Caption*** property

Handy to Know…

- Changing a caption directly on a form is probably easier than using the ***Property Sheet*** pane, if you are renaming several captions. The ***Property Sheet*** pane might be more useful when you want to change several properties for a single control.

ADDING AN UNBOUND CONTROL

The fields used for data from a table or query are referred to as ***bound*** controls – they are bound (linked) to a data source. Controls that have no links to data are known as ***unbound controls*** and fall into two categories: ***dynamic*** and ***static***. A static unbound control is one that doesn't change, while a dynamic unbound control is one that is usually based on an expression (formula).

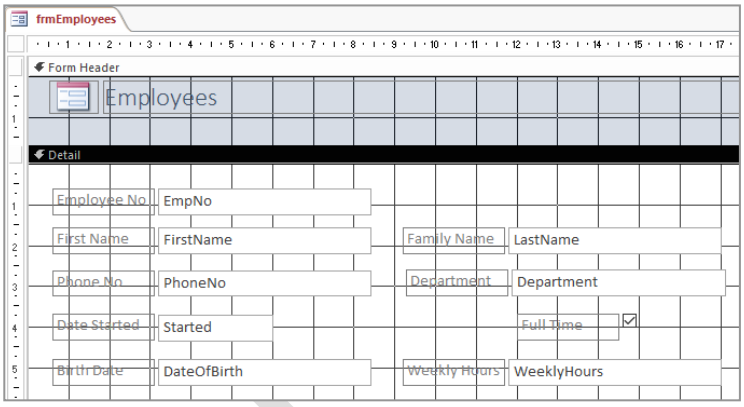
Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Modifying Forms_6.accdb...

1. Open ***frmEmployees*** in ***Design View***
2. Resize the ***Started*** control, then move the ***Full Time*** controls to make room for a new control, as shown
3. On the ***Form Design Tools: Design*** tab, click on ***Text Box*** in the ***Controls*** group and click in the blank area you made in step ***2***
4. Point to the small dark square above the ***Text*** label until it changes to a four-headed arrow, then click and drag it to the right to move the label closer to the ***Unbound*** control
5. Align the row of controls so that they are neatly arranged
6. Save and close the form

2



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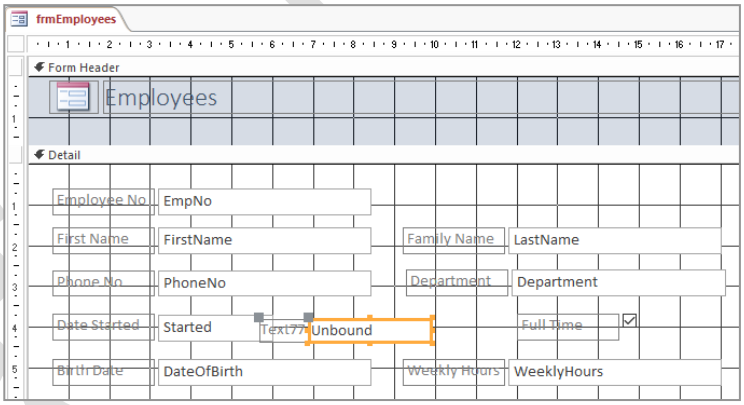

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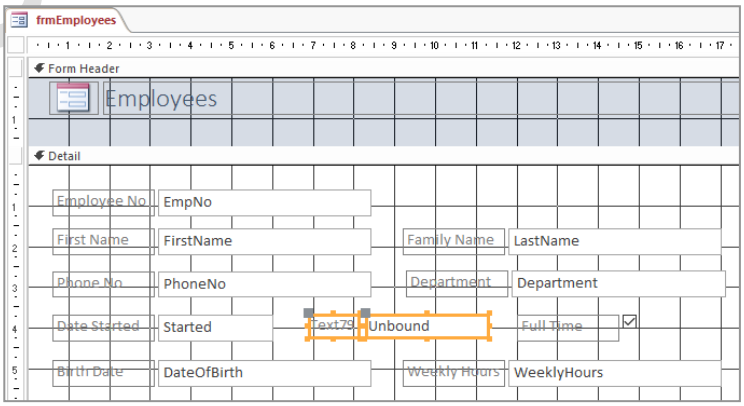


For Your Reference…

To ***add*** an ***unbound control*** to a ***form***:

1. Open the form in ***Design View***
2. On the ***Form Design Tools: Design*** tab, choose the desired control from the gallery in the ***Controls*** group
3. Click in the form to position the new control

Handy to Know…

- Bound controls appear differently in ***Design View*** compared to the other views – in ***Design View*** they show the field name (which is usually the same as the caption) in lieu of a field value.

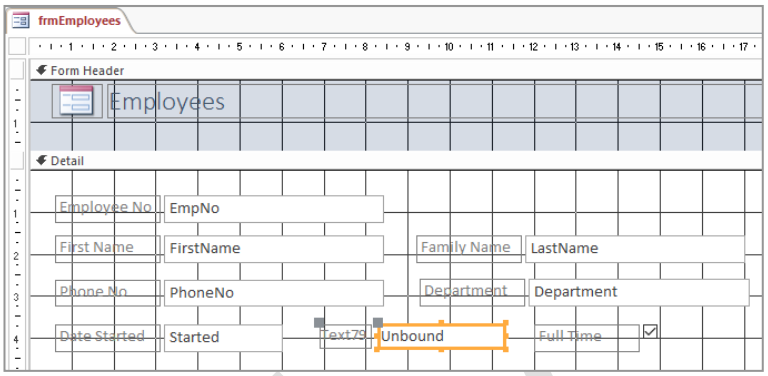
ADDING A CONTROL SOURCE

Unbound controls can be used to display ***static*** text, as in the form of a label control which shows the caption for a field, or they can be used to display ***dynamic***, changing information. In our example, we'll use an unbound form to show the length of service of the employee. This will require us to enter a formula, known in Access as an ***expression***, into the ***control source property***.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_7.accdb...*

1. Open ***frmEmployees*** in ***Design View***
2. Click on the ***Unbound*** control to select it
3. On the ***Form Design Tools: Design*** tab, click on ***Property Sheet*** in the ***Tools*** group to display the ***Property Sheet*** pane
4. Click on the ***Data*** tab, then click in ***Control Source*** and type the formula as shown – press Enter when finished
5. Click on the ***Other*** tab in the ***Property Sheet*** pane, then double-click on the text in the ***Name*** property to select it
6. Type **YearsOfService** and press Enter
7. Close the ***Property Sheet*** pane
8. Save and close the form



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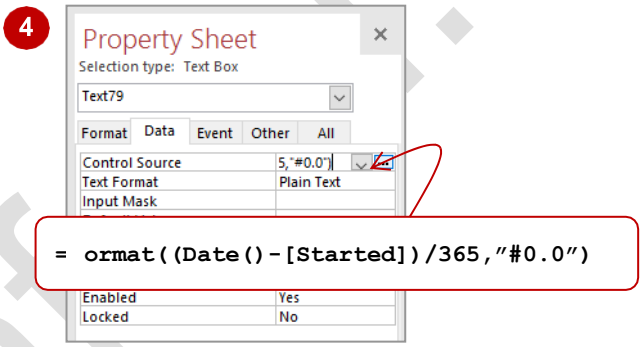
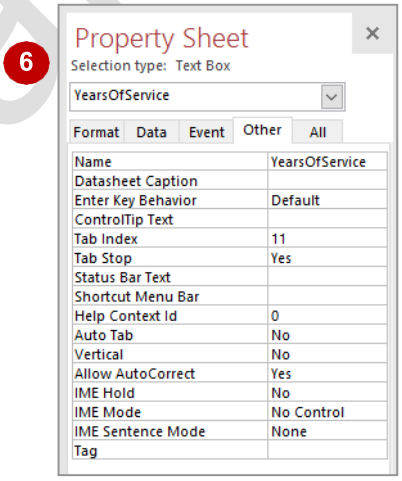




For Your Reference…

To ***add*** a ***control source***:

1. Click on the unbound control
2. In the ***Property Sheet*** pane, click in the ***Control Source*** property and type an appropriate expression (formula)

Handy to Know…

- A control source expression can use both round and square brackets, where the square brackets are used to indicate the name of an existing field.

FORMATTING A CONTROL

One of the tasks frequently performed when modifying a form is to change the ***formatting*** properties of specific objects. In our case study, a new unbound control has been added to the form but it has taken on the default formatting rather than that of the existing controls. To make the new control resemble the existing controls we will need to change some of the properties.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_8.accdb...*

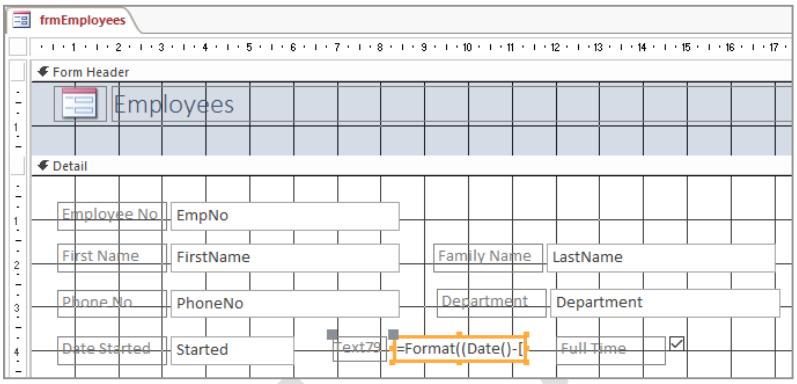
1. Open ***frmEmployees*** in ***Design View***, then click on the unbound control (***YearsOfService***)
2. On the ***Form Design Tools: Design*** tab, click on ***Property Sheet*** in the ***Tools*** group to display the ***Property Sheet*** pane
3. Change the properties to:

Tab	Property	Setting
Format	*Height*	*0.635cm*
Data	*Locked*	*Yes*

4. Click on the label control to select it
5. Change the properties to:

Tab	Property	Setting
Format	*Caption*	*Service*
Format	*Height*	*0.635cm*

6. Close the ***Property Sheet*** pane, then use the alignment tools on the ***Form Design Tools: Arrange*** tab to align the controls as shown
7. Save and close the form



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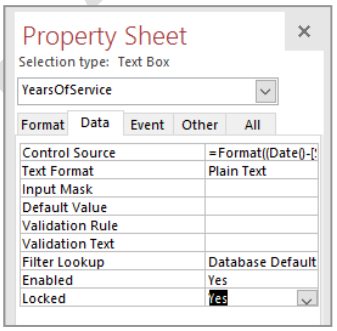

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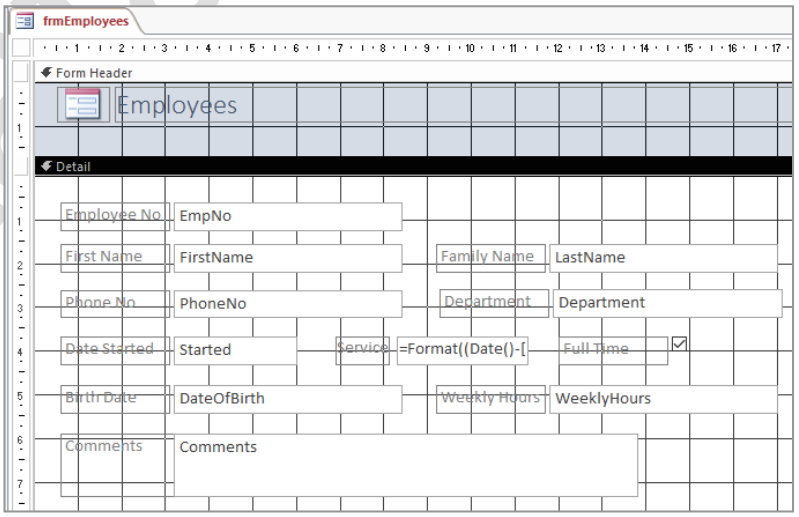


6

For Your Reference…

To ***format*** a ***control***:

1. Click on the control to select it
2. Change the appropriate properties in the ***Property Sheet*** pane

Handy to Know…

- On a form, the ***Locked*** property for a text box control locks the control from editing and ensures that the user can't change the value that appears.

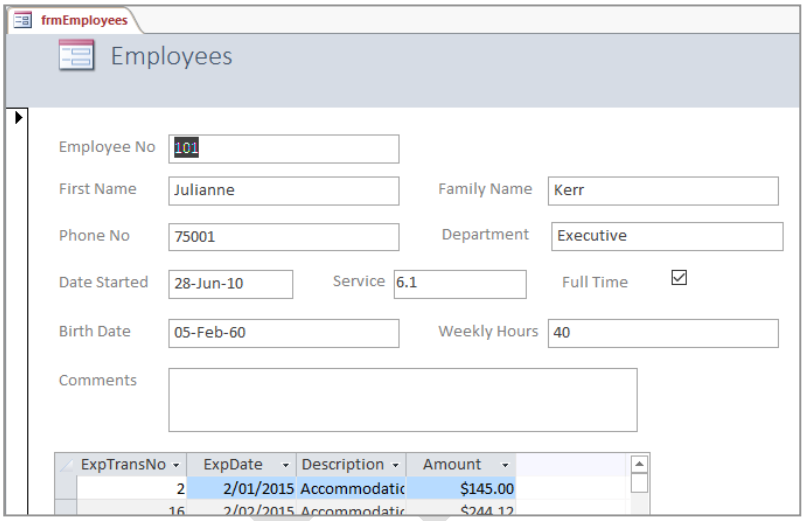
CHECKING THE CURRENT TAB ORDER

For faster data entry, many users prefer to press the Tab key to move through the fields on a running form. When you use the form generation tools in Access, the fields are placed into a sequential ***tab order***. If you have modified the form by moving field controls around there is a good chance that the tab order will be out of sequence.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_9.accdb...*

1. Double-click on ***frmEmployees*** to run the form
2. Press Tab three times and notice how the selected field is now ***Department*** – if the controls were ordered sequentially it should be ***Phone No***
3. Press Tab slowly until you eventually get back to ***Employee No*** and note the non-sequential order in which Access moves through the fields
4. Close the form



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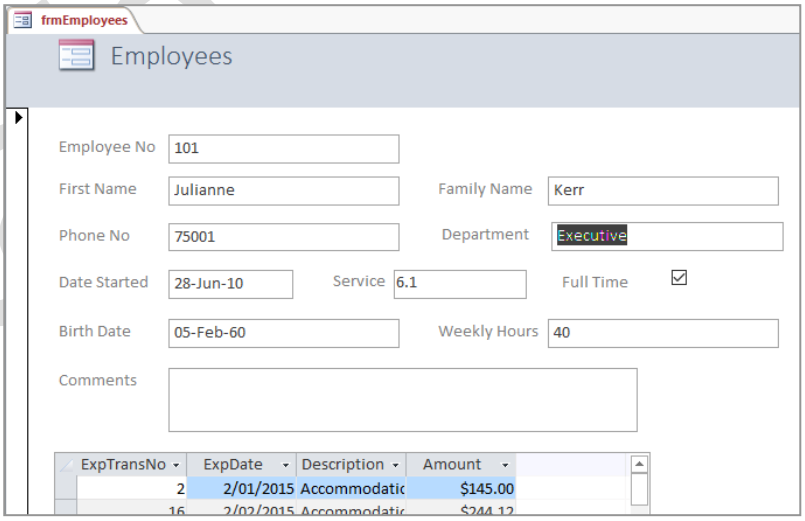


2

For Your Reference…

To ***check the tab order*** of the ***form***:

1. Run the form
2. Press Tab to move through the fields

Handy to Know…

- You can press Shift + Tab to move backwards through the fields on a form.
- You can use the arrow keys on the keyboard to move between fields on a form.

CHANGING THE TAB ORDER

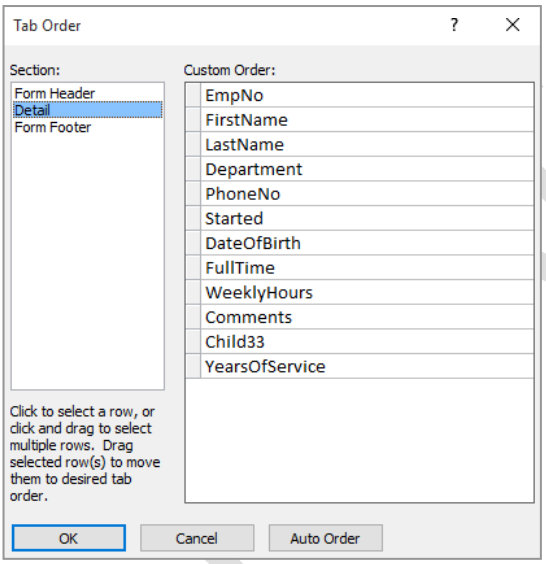
If the tab order of a form is out of sequence, you can change it using the ***Tab Order*** dialog box. This dialog box allows you to specify the order for each tab control by dragging them up or down in a list. Alternatively, the dialog box has an **[Auto Order]** button which automatically sets the order to the sequence in which the controls appear on the form.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Modifying Forms_9.accdb...*

1. Open ***frmEmployees*** in ***Design View***
2. On the ***Form Design Tools: Design*** tab click on ***Tab Order*** in the ***Tools*** group, to display the ***Tab Order*** dialog box
3. Click on **[Auto Order]** to change the order of the controls in sequence with the layout on the form
4. Click on **[OK]**
5. Save and close the form
6. Run the form, then press Tab to move through the fields to ensure that the tab order is correct
7. Close the form

2



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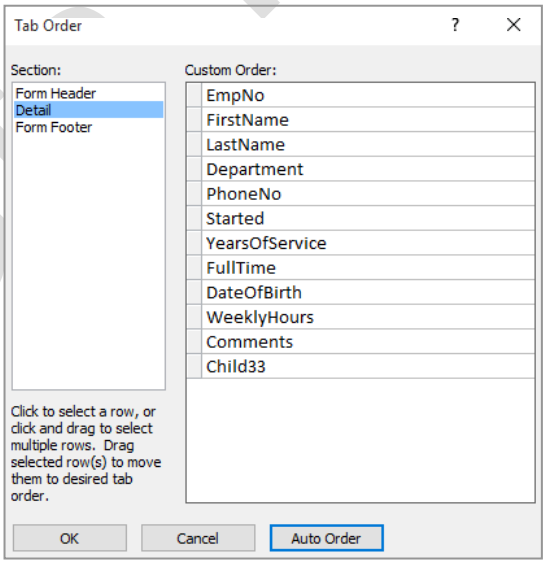


For Your Reference…

To ***change the tab order*** of a ***form***:

1. Open the form in ***Design View***
2. On the ***Form Design Tools: Design*** tab, click on ***Tab Order*** in the ***Tools*** group
3. Click on **[Auto Order]**

Handy to Know…

- If you want to specify your own order for the controls on a form, in the ***Tab Order*** dialog box, click on the control in the list and drag it to the desired location in the list.

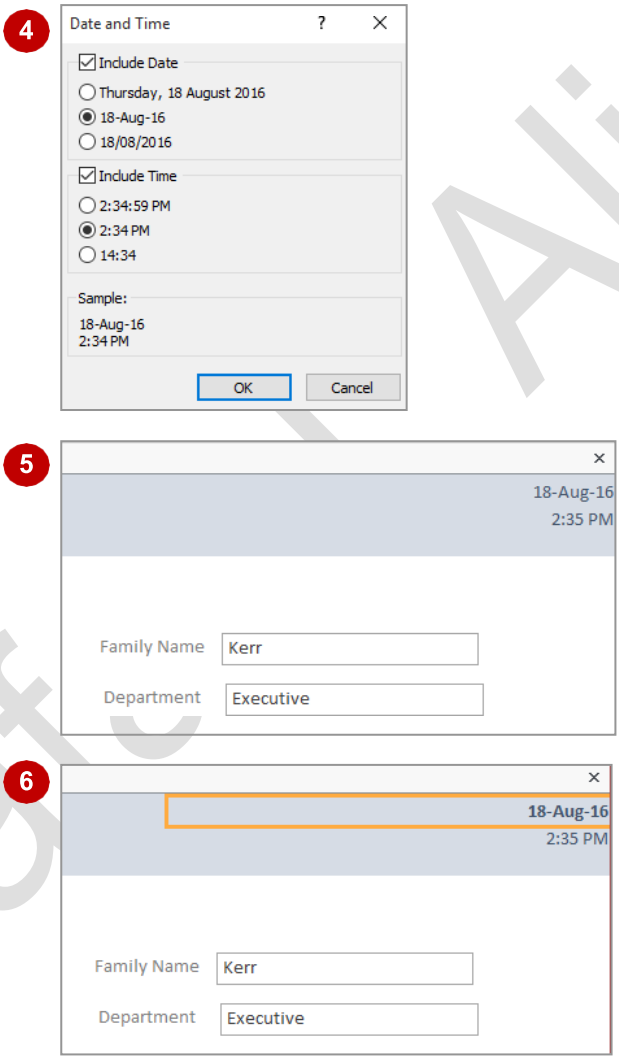
INSERTING THE DATE INTO THE FORM HEADER

The top part of the form is known as the ***form header***. It is usually reserved for information such as the name and purpose of the form – for instance, our case study form shows the title *Employees*. But you can also use this area to insert other controls that display information such as the date and the time.

Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Modifying Forms_10.accdb...*

1. Open ***frmEmployees*** in ***Layout View***
2. On the ***Form Layout Tools: Design*** tab, click on ***Date and Time*** in the ***Header/Footer*** group to display the ***Date and Time*** dialog box
3. Ensure that both ***Include Date*** and ***Include Time*** are ticked
4. Click on the middle date format and the middle time format to select them
5. Click on **[OK]** to insert the current date and time into the top right of the form header area
6. Click on the date to select the unbound control, then on the ***Form Layout Tools: Format*** tab, click on ***Bold*** in the ***Font*** group
7. Save and close the form



For Your Reference…

To ***insert the date and time*** into the ***header***:

1. Open the form in ***Layout View***
2. On the ***Form Layout Tools: Design*** tab, click on ***Date and Time*** in the ***Header/Footer*** group
3. Change the settings and click on **[OK]**

Handy to Know…

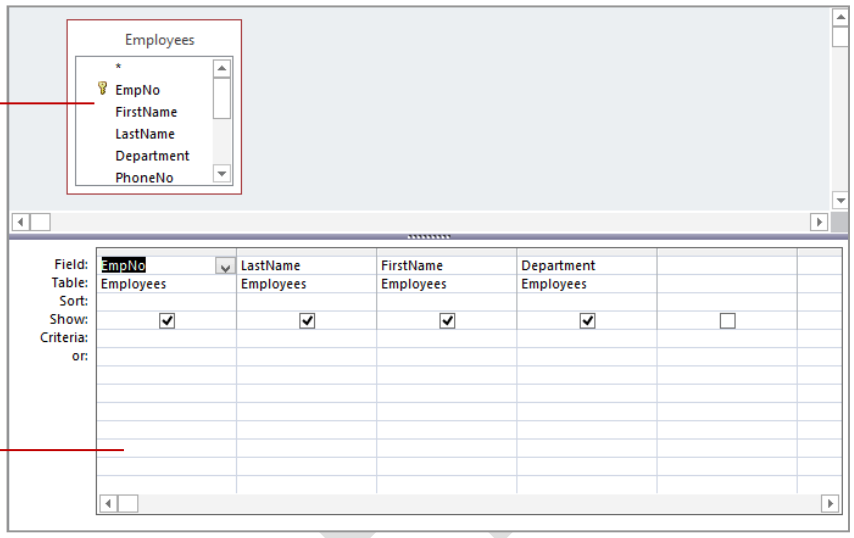
- The same procedure for adding the date and time to a form header can also be used for adding a date and time to a ***report*** header.

UNDERSTANDING QUERIES

A ***select query*** is like a filter that you place on your data so that you see only the information that is relevant to you. Select queries can be used, for example, to produce a list of customers from Tasmania, or all of the items that you've purchased in the last six months valued at $300 or more. Select queries are so named because they *select* records according to your query design.

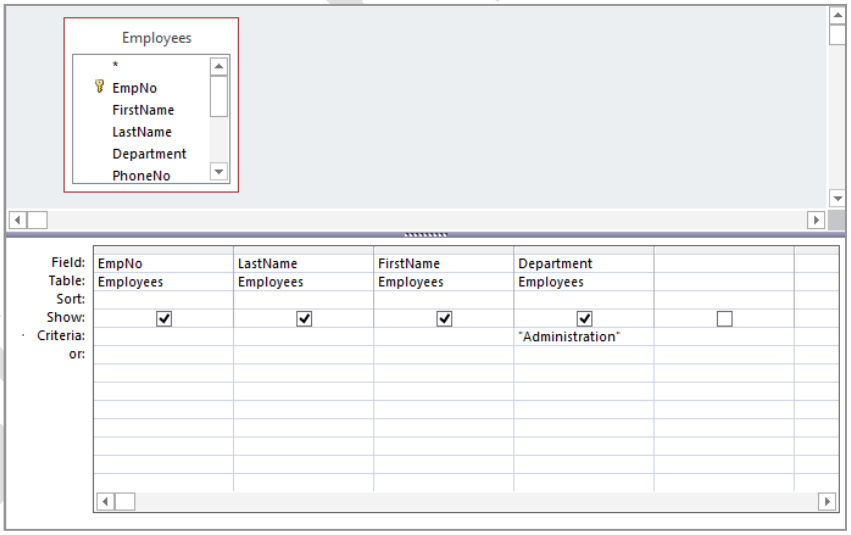
Select queries are created using the ***Create*** tab of the ribbon, and are run and modified as a ***Query*** object in the ***Navigation*** pane.

Select queries are based on a ***Query Design***. The upper part of the design is known as the ***Field List***, while the lower portion is known as the ***Query Grid***.



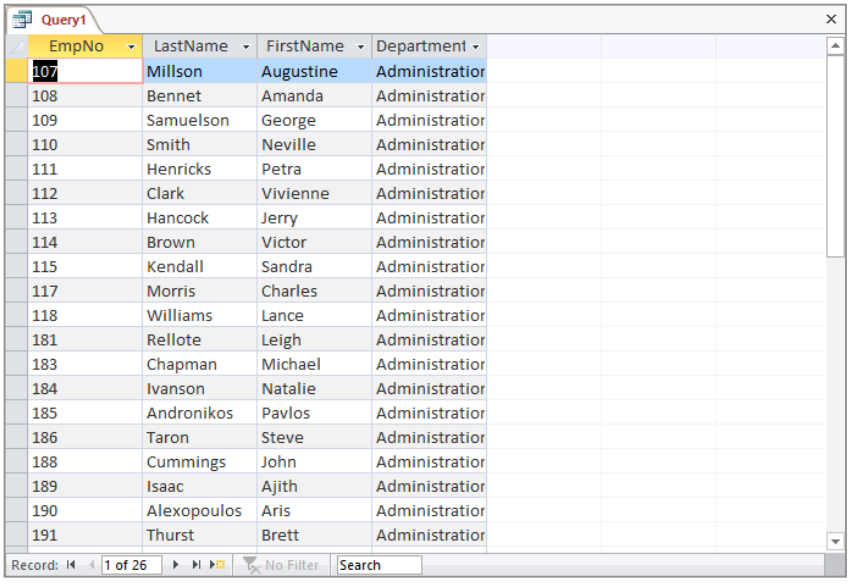
Field list
Query grid

The records displayed in the query are determined by the sample data that you enter into the ***Criteria row*** in the ***Query Grid*** – this is why the process is sometimes referred to as *query by example*.



Criteria row

The easiest way to see the data is to switch to ***Datasheet*** view. In ***Datasheet*** view the data that matches the query criteria is displayed in a special ***dynaset*** table. A ***dynaset*** is a subset of the full table of data – however, it is still a live set of data and any changes made to data here will be reflected back in the full table later on.



CREATING A QUERY DESIGN

Queries are created from the ***Create*** tab on the ribbon. Like table structures, there is a ***design*** view where the layout, criteria, and the like, required for the query are specified, and a ***run*** view where the data is brought into the design layout structure from the relevant table. The first step in creating a query, therefore, is to create a query design structure.

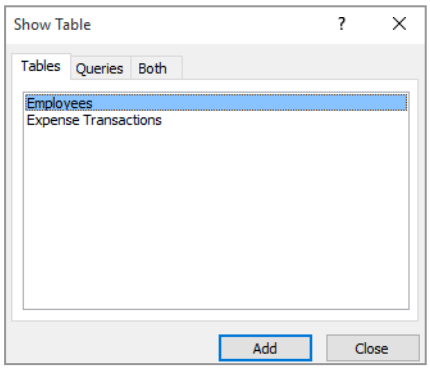
Try This Yourself:

Open File — *Before starting this exercise you MUST open the file Creating Queries_1.accdb…*

1. Click on the ***Create*** tab, then click on ***Query Design*** in the ***Queries*** group to display a new query design and the ***Show Table*** dialog box
2. Click on **[Add]** to add the ***Employees*** table fields to the design, then click on **[Close]** to close the dialog box
3. In the field listing double-click on ***EmpNo***, ***LastName***, ***FirstName*** and ***Department*** to add these fields to the grid in this order
4. Click on ***Save*** in the ***QAT*** to display the ***Save As*** dialog box
5. Type **qryEmployees** in ***Query Name***, then click on **[OK]**

   The name of the query will now appear in the Navigation pane under the Queries header…
6. Close the query

1



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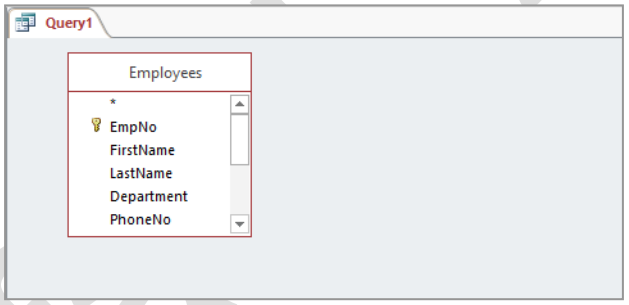
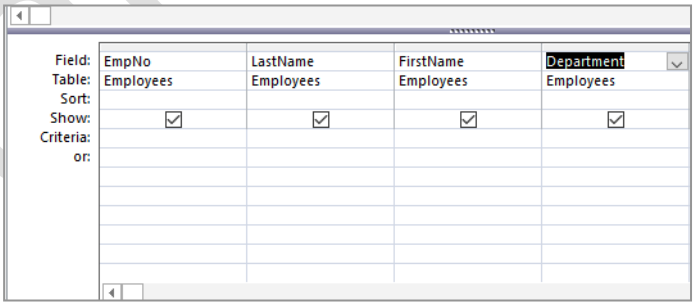


Double-click on the entries here to add them to the table below



3

For Your Reference…

To ***create*** a ***query design***:

1. Click on the ***Create*** tab
2. Click on ***Query Design*** in the ***Queries*** group
3. Add the table and select the fields
4. Save the query

Handy to Know…

- The ***Show Table*** dialog box, displayed when creating a new query design, lists all of the tables and queries in the current database file.

WORKING WITH A QUERY

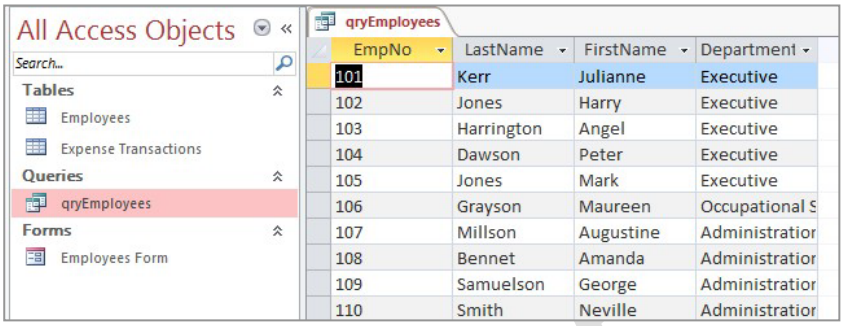
Queries offer you the ability to see snapshots of your data – a particular view or representation of your data at a point in time. There are three main views within a query: the ***design*** view where you specify what data you wish to see in the snapshot; the ***datasheet*** view where the data based on the design is displayed; and ***SQL*** view which shows the programming behind the query.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Creating Queries_2.accdb...

1. Double-click on ***qryEmployees*** to see the query in ***Datasheet*** view, displaying the data
2. On the ***Home*** tab, click on the top half of ***View*** in the ***Views*** group to toggle between ***Design*** and ***Datasheet*** views
3. Click on the bottom half of ***View*** to display a menu of options
4. Select **SQL View** to see the ***SQL*** code required behind the scenes to create the query
5. Close the query



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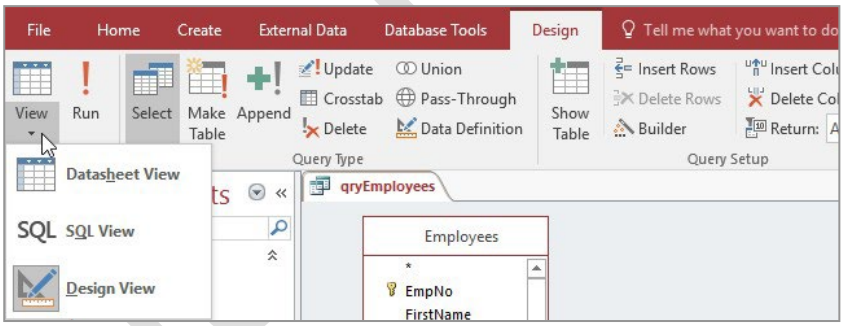
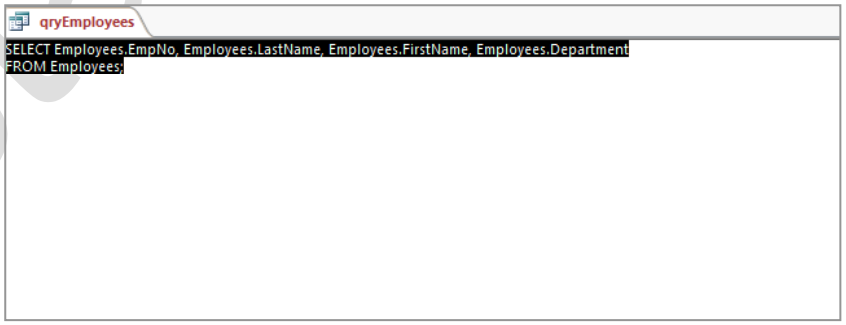


3



4

For Your Reference…

To ***see different aspects*** of a ***query***:

1. Double-click on the query to see it in ***Datasheet*** view
2. On the ***Home*** tab, click on the top half of ***View*** in the ***Views*** group to toggle between ***Design*** and ***Datasheet*** views

Handy to Know…

- Until you seriously get into programming, you won't use the ***SQL View*** option for queries all that often. SQL is pronounced "sequel" or simply S.Q.L.

CHANGING A QUERY DESIGN

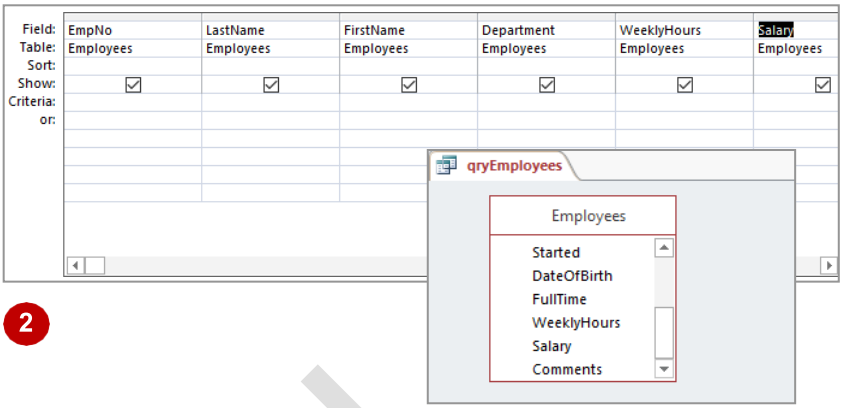
Most ***query designs*** are not as critical as table designs and can therefore be changed randomly and when the need arises. ***Select queries***, where you are trying to extract matching data, are often run using a trial and error approach where the query design is experimented with and modified until the perfect solution is found.

Try This Yourself:

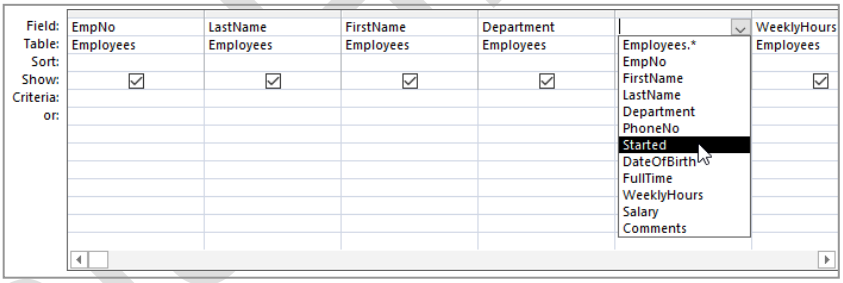
Same File *Continue using the previous file with this exercise, or open the file Creating Queries_3.accdb...*

1. In the ***Navigation*** pane, right-click on ***qryEmployees*** to display a menu of options, then select **Design View** to see the query in ***Design*** view
2. Scroll down the list of fields in the ***Employee*** field listing and double-click on ***WeeklyHours*** and then ***Salary*** to place both fields at the end of the grid
3. Click on ***WeeklyHours*** in the grid then, on the ***Query Tools: Design*** tab, click on ***Insert Columns*** in the ***Query Setup*** group

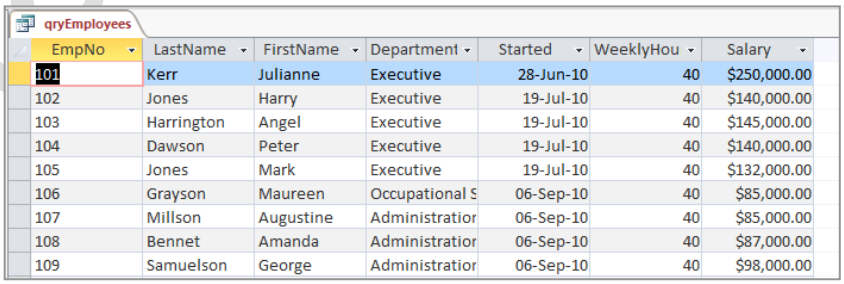
   A new, blank column will appear…
4. Click on the drop arrow in the new column and select **Started**
5. Click on the ***Home*** tab, then click on the top half of ***View*** in the ***Views*** group to run the query and see the data presented in the modified design
6. Click on ***Save*** in the ***QAT***, then close the query



2



4



5

For Your Reference…

To ***insert more fields*** into a ***Design grid***:

- Double-click on the field name in the field listing, or
- Click in the grid, then click on ***Insert Columns*** in the ***Query Setup*** group

Handy to Know…

- You can delete a field from a query grid by clicking on it and then clicking on ***Delete Columns*** in the ***Query Setup*** group on the ***Home*** tab.

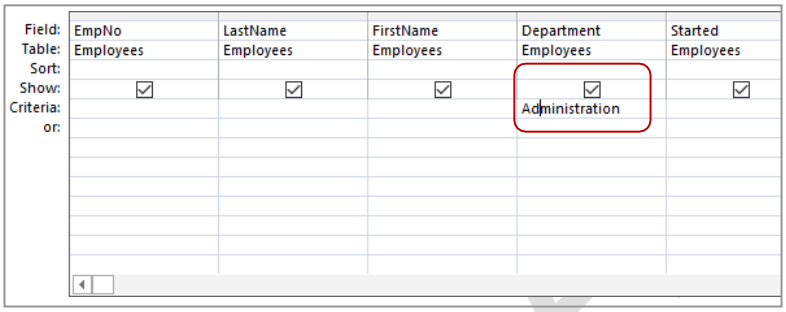
APPLYING RECORD CRITERIA

The real power of a query lies in its ability to display a filtered list of records in a ***dynaset***. To filter the records and see only the ones that you want, you will need to enter search criteria in the criteria row in the query grid. You simply type an example of the data that you want to see in the criteria cell and run the query to display all records from the original table that match the criteria.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Creating Queries_4.accdb...*

1. Right-click on ***qryEmployees*** to display a menu of options and select **Design View**
2. Click in the ***Criteria*** cell for ***Department*** and type **Administration**
3. On the ***Query Tools: Design*** tab, click on the top half of ***View*** in the ***Views*** group to see only those records with ***Administration*** in the ***Department*** field
4. Repeat step ***3*** to switch back to ***Design*** view
5. Type **40** in the ***Criteria*** cell for ***WeeklyHours***, then click on ***View*** to display only those people who work **40** hours in the ***Administration*** department
6. Switch to ***Design*** view and type **>=80000** in the ***Criteria*** cell for ***Salary***, then click on ***View*** to see all ***Administration*** people who work ***40*** hours and earn ***$80,000*** or more
7. Save and close the query



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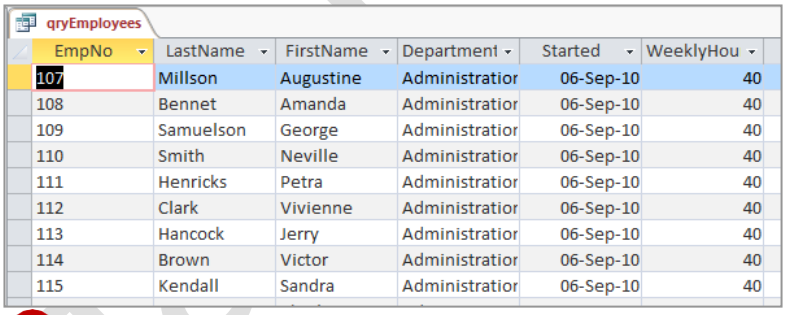
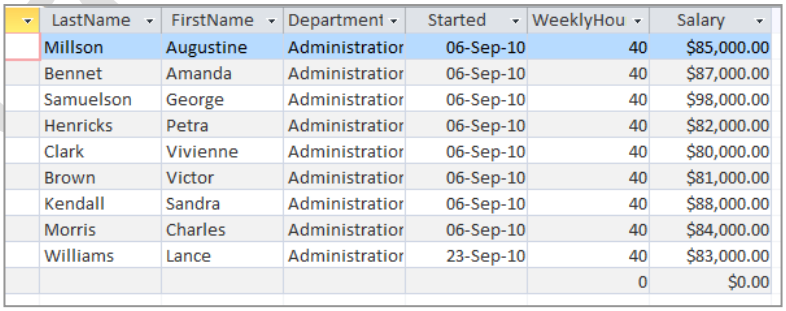


3



6

For Your Reference…

To ***select records*** in a ***query***:

1. Click in the ***Criteria*** cell for a field and type the desired search criteria
2. On the ***Query Tools:Design*** tab, click on ***View*** in the ***Views*** group to run the query

Handy to Know…

- When creating queries, if you add more criteria across fields, you are creating what is known as an ***AND*** query – you want records that have this AND this AND this...
- When constructing queries, use **>** for greater than and **<** for less than situations.

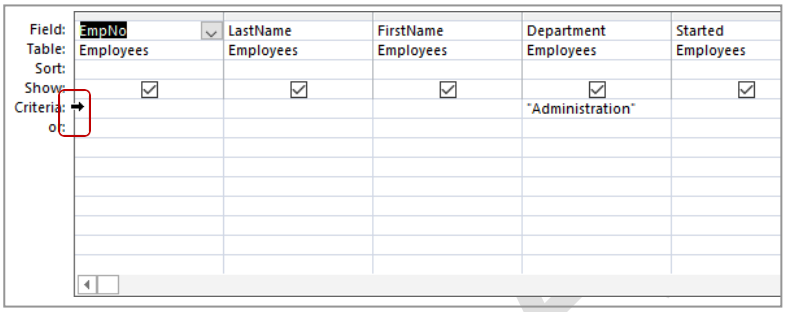
CLEARING SELECTION CRITERIA

You do need to exercise a little care when running queries. If you leave residual criteria from an earlier query in the query grid (which is easy to do if you have more fields than can be seen on the screen), you may end up with incorrect results. It is a good idea therefore to clear the selection criteria after you have performed a query and found the data that you want.

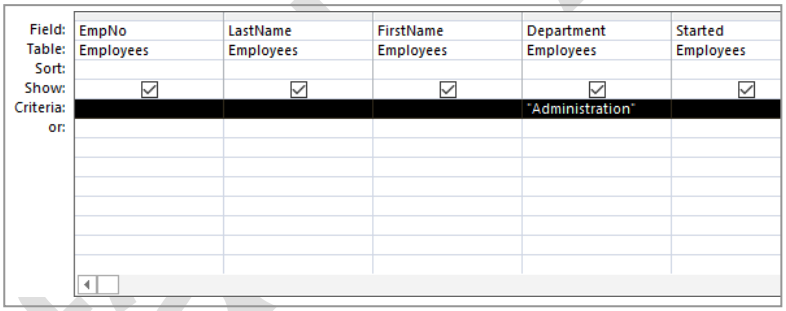
Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Creating Queries_5.accdb...*

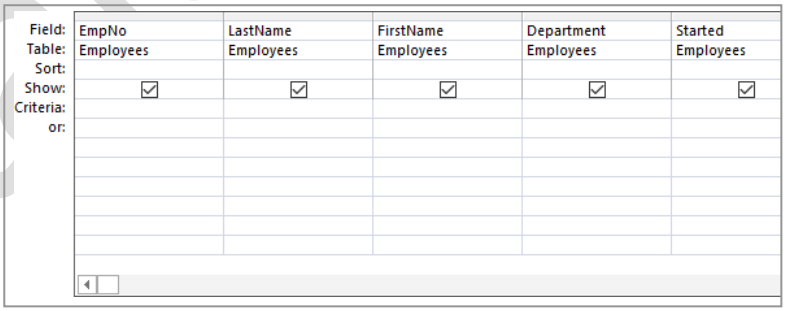
1. In the ***Navigation*** pane, right-click on ***qryEmployees*** to display a menu of options and select **Design View**
2. Point to the left of the first criteria cell until the mouse pointer changes to a black horizontal arrow ➡
3. Click once to select the entire criteria row
4. Press Del to delete all of the criteria in the row
5. Save and close the query



2



3



4

For Your Reference…

To ***clear selection criteria***:

1. Point to the left of the row and click once to select it
2. Press Del to delete the criteria in the row

Handy to Know…

- When working with a query design, you can delete the contents of a single cell in the ***Criteria*** row by double-clicking on the value in the cell and pressing Del.

SAVING A QUERY

There are two main types of select queries: those that you create as a one-off search of the data; and those that you create for repeated and on-going use. If you are going to use a query on a regular basis it should be saved. You can then also use it as a template to create other queries with variations perhaps to the criteria or the field grid.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Creating Queries_6.accdb...*

1. Right-click on ***qryEmployees*** to display a menu of options and select **Design View**
2. Type **Administration** in the ***Criteria*** cell for ***Department***
3. On the ***Query Tools: Design*** tab, click on ***View*** in the ***Views*** group to see the results – there should be 26 records
4. Click on the ***File*** tab, then click on **Save As** to display the ***Save As*** area
5. Click on ***Save Object As*** in ***File Types***, then click on **[Save As]** to display the ***Save As*** dialog box
6. Type **qryEmployeesAdmin** and click on **[OK]**

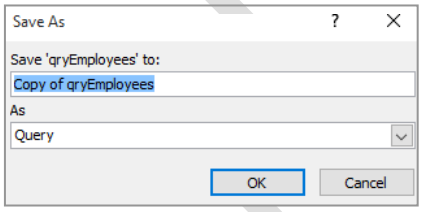
   The new query appears in the Navigation bar…
7. Switch to ***Design*** view then repeat steps ***2*** to ***6*** to create another query that only displays employees from the ***Executive*** department – save this query as ***qryEmployeesExec***
8. Close the query

189	Isaac	Ajith	Administratior	16-Dec-10	40
190	Alexopoulos	Aris	Administratior	27-Nov-10	40
191	Thurst	Brett	Administratior	16-Dec-10	40
192	Ahlund	Christof	Administratior	09-Dec-10	40
193	Zylinski	David	Administratior	20-Nov-10	32
194	Hurst	Ellinor	Administratior	27-Nov-10	40
203	Hutchins	Philip	Administratior	27-Nov-10	40
204	Baker-Smith	Susan	Administratior	16-Dec-10	40
205	Abelseth	Trond	Administratior	02-Dec-10	25
					0

Record: 1 of 26 No Filter Search

3

5



7

qryEmployeesAdmin

EmpNo	LastName	FirstName	Department	Started	Week
101	Kerr	Julianne	Executive	28-Jun-10	
102	Jones	Harry	Executive	19-Jul-10	
103	Harrington	Angel	Executive	19-Jul-10	
104	Dawson	Peter	Executive	19-Jul-10	
105	Jones	Mark	Executive	19-Jul-10	

For Your Reference…

To ***save*** a ***query***:

1. Create the query
2. On the ***File*** tab, click on **Save As**, then click on ***Save Object As*** and click on **[Save As]**
3. Type a name and click on **[OK]**

Handy to Know…

- It is important to give your queries meaningful names so that you remember what they are for. Using a prefix, such as ***qry***, will tell you at a glance that you are looking at a list of queries and make the queries easier to distinguish from tables, forms and reports.

RUNNING QUERIES FROM THE NAVIGATION PANE

Queries store the layout, fields, criteria and other information required to produce the list of data that you want. Given that they can be time consuming to create, especially in the case of complex queries, it makes sense to save them and then run them as often as you require. Queries can be run directly from the object listing in the ***Navigation*** pane, as often as you like.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Creating Queries_7.accdb...

1. In the ***Navigation*** pane under ***Queries***, double-click on ***qryEmployees***, then double-click on ***qryEmployeesAdmin***, then double-click on ***qryEmployeesExec***

   Notice how the names of the three queries appear in three separate tabs at the top of the window. The last query opened is the one that is currently seen and is known as the "active" query…

2. Click on the tab for ***qryEmployeesAdmin*** to see the employees in the ***Administration*** department

3. Click on the tab for ***qryEmployees*** to see all of the employees

4. Close each query

qryEmployees | qryEmployeesAdmin | qryEmployeesExec

EmpNo	LastName	FirstName	Department	Started	WeeklyHou	Salary
101	Kerr	Julianne	Executive	28-Jun-10	40	$250,000.00
102	Jones	Harry	Executive	19-Jul-10	40	$140,000.00
103	Harrington	Angel	Executive	19-Jul-10	40	$145,000.00
104	Dawson	Peter	Executive	19-Jul-10	40	$140,000.00
105	Jones	Mark	Executive	19-Jul-10	40	$132,000.00
*					0	$0.00

1

qryEmployees | qryEmployeesAdmin | qryEmployeesExec

EmpNo	LastName	FirstName	Department	Started	WeeklyHou	Salary
107	Millson	Augustine	Administratior	06-Sep-10	40	$85,000.00
108	Bennet	Amanda	Administratior	06-Sep-10	40	$87,000.00
109	Samuelson	George	Administratior	06-Sep-10	40	$98,000.00
110	Smith	Neville	Administratior	06-Sep-10	40	$78,000.00
111	Henricks	Petra	Administratior	06-Sep-10	40	$82,000.00
112	Clark	Vivienne	Administratior	06-Sep-10	40	$80,000.00
113	Hancock	Jerry	Administratior	06-Sep-10	40	$79,000.00

2

qryEmployees | qryEmployeesAdmin | qryEmployeesExec

EmpNo	LastName	FirstName	Department	Started	WeeklyHou	Salary
101	Kerr	Julianne	Executive	28-Jun-10	40	$250,000.00
102	Jones	Harry	Executive	19-Jul-10	40	$140,000.00
103	Harrington	Angel	Executive	19-Jul-10	40	$145,000.00
104	Dawson	Peter	Executive	19-Jul-10	40	$140,000.00
105	Jones	Mark	Executive	19-Jul-10	40	$132,000.00
106	Grayson	Maureen	Occupational S	06-Sep-10	40	$85,000.00
107	Millson	Augustine	Administratior	06-Sep-10	40	$85,000.00

3

For Your Reference…

To ***run*** a ***query from*** the ***Navigation pane***:

- In the ***Navigation*** pane, double-click on the name of the query from the ***Query*** object list

Handy to Know…

- Queries do not contain data. Each time a query is opened in ***Datasheet*** view, Access retrieves the latest data from the table upon which the query is based and uses the query design to display the relevant records and information.

DELETING A QUERY

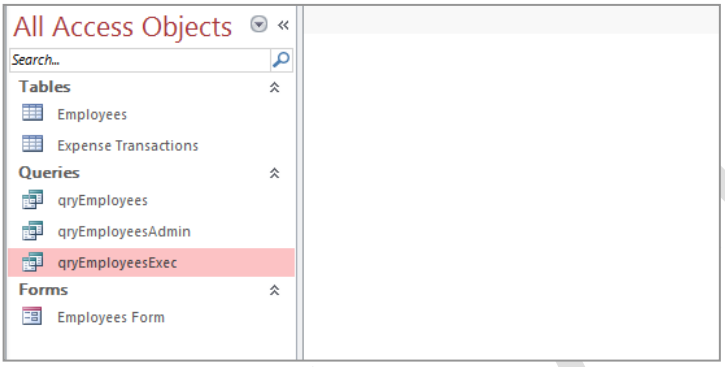
Queries often work with data that is stored in tables or that results from other queries. They can be used to create data by performing calculations and can be used as a source of data for other queries, forms and reports. Therefore, you should be especially careful when deleting queries – make sure that the query is not used by any other objects in the database first.

Try This Yourself:

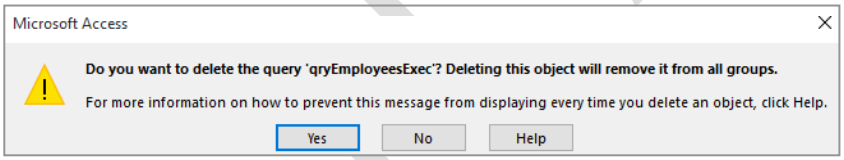
Same File

Continue using the previous file with this exercise, or open the file Creating Queries_7.accdb...

1. Click on ***qryEmployeesExec*** in the ***Navigation*** pane to select it

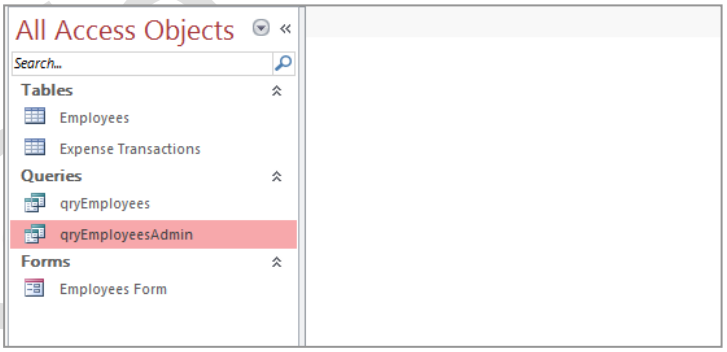


2. On the ***Home*** tab, click on ***Delete*** in the ***Records*** group



A warning message will appear, seeking your confirmation to delete the query…

3. Click on **[Yes]** to confirm the deletion



The query no longer appears listed under Queries in the Navigation pane

For Your Reference…

To ***delete*** a ***query from*** a ***database file***:

1. Click on the name of the query in the ***Navigation*** pane
2. On the ***Home*** tab, click on ***Delete*** in the ***Records*** group

Handy to Know…

- You can delete a query by clicking on it in the ***Navigation*** pane and pressing Del.

CREATING ADDITIONAL QUERIES

Select queries are by far the most common type of query that you will create and use. In this assignment you will have the opportunity to put your understanding of queries to use by creating a wide range of different queries, including those that show records that match specific criteria, and those that fit within specific ranges of dates.

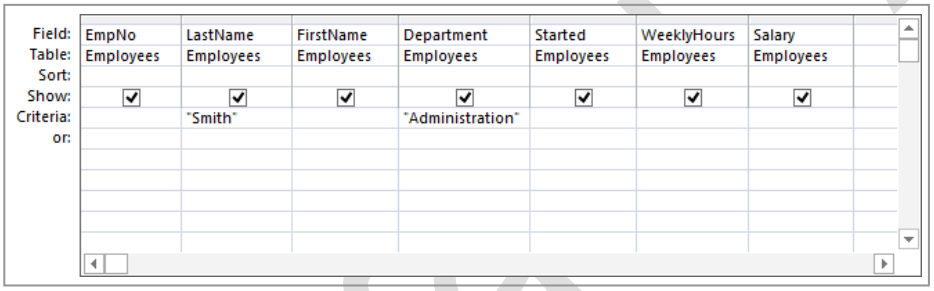
Sub Heading

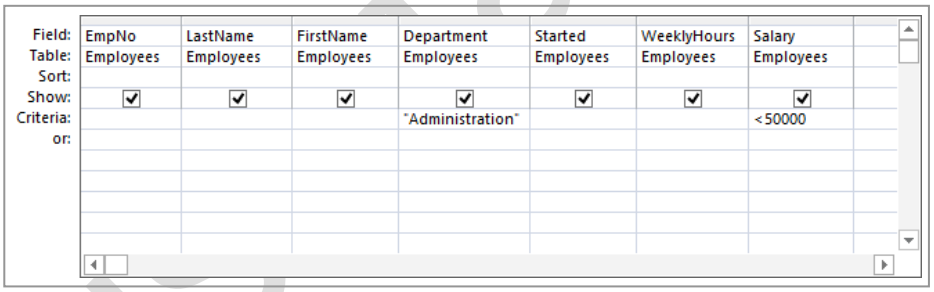
Use the qryEmployees query to run the various queries as shown. Note that you will have to clear the criteria from time to time. Also, we won't need these queries so there is no need to save them.

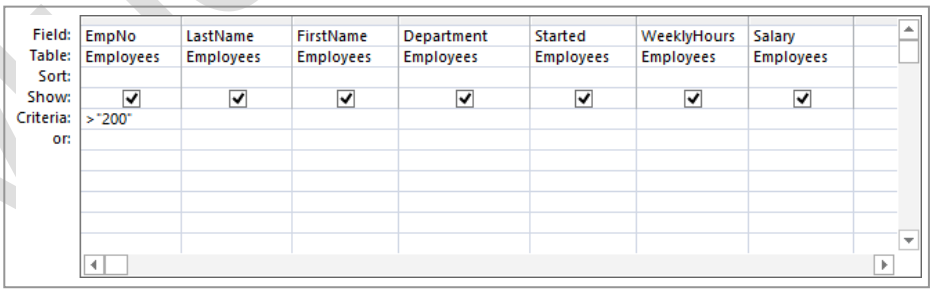
Save the final query design as ***qryEmployeesNew*** then close it.

The datasheet that shows the results is exactly like a table and you can therefore use the Print commands on the ***File*** tab to print the result once the datasheet is displayed.

Access automatically places quotation marks around criteria based on text. The quotation marks are programming symbols that tell the computer to treat the data as character strings rather than numbers.







UNDERSTANDING REPORTING IN ACCESS

Reports provide you with a means of more formally presenting, and even analysing, data from your tables and queries. Reports have traditionally been produced as printed documents but they can also be viewed on the screen or published to the web. Before creating a report, it is advisable to understand how they work and what they can actually do for you.

Creating Reports

All database systems, including Access, provide you with a ***report generator*** facility to design your reports. Reports themselves do not contain data, but are created as structural ***templates*** into which the data is placed when the report is run. The template basically defines *what to display* (e.g. which fields to use), *where to display it* (e.g. where the fields should appear on the page), and *how it should look* (e.g. font size, colour, etc).

When a report is first created it is based on either an existing table or an existing query. You base the report on a table if you wish to report on all of the data, or a query if you wish to report on just a subset of the data.

The Many Ways of Creating a Report

In Access you can create simple reports or very complex and intricate reports. So, as you'd expect, Access offers several ways for you to create reports. In Access, reports are created from the tools on the ***Create*** tab on the ribbon. Here you can create:

- A basic, no frills report using the ***Report*** tool – these reports appear almost instantly and require very little work on your part. All of the work is done for you.
- More intricate reports using the ***Report Wizard*** tool – the ***Report Wizard*** metaphorically holds your hand and asks you a series of questions which ultimately, when answered, result in a report.
- A complex, elaborate report using either the ***Blank Report*** tool or the ***Report Design*** tool – these options present you with a blank report canvas and you are required to do all of the work to lay out what you want, where you want it, and how it should look. This is the most difficult of the options to use as you have to do everything yourself.

Achieving a Balance

There is no right or wrong way to create reports – choose the method that achieves the results using the least amount of time and effort.

The beauty of the reporting tools in Access is that even after you have created a report using any of the techniques, the report can still be edited, modified and customised to suit specifically what you are after. So even if the basic report doesn't quite provide you with what you want or the ***Report Wizard*** hasn't quite done all it should, you can still change the report design yourself.

Many Access users create their reports using the ***Report*** tool or the ***Report Wizard*** tool, and then fine-tune the layout or the design to suit their needs.

CREATING A BASIC REPORT

The easiest and simplest way to create a basic report in Access is to use the ***Report*** tool which is located on the ***Create*** tab on the ribbon. All you need to do here is to select the table or the query in the ***Navigation*** pane as the basis for the report and then run the command.

Try This Yourself:

Open File *Before starting this exercise you MUST open the file Reports_1.accdb…*

1. In the ***Navigation*** pane, click on the ***Employees*** table to select it

   This indicates the table to base the report on…

2. Click on the ***Create*** tab, then click on ***Report*** in the ***Reports*** group

   A report layout will instantly appear. The Layout View of the report allows you to make adjustments to the report template…

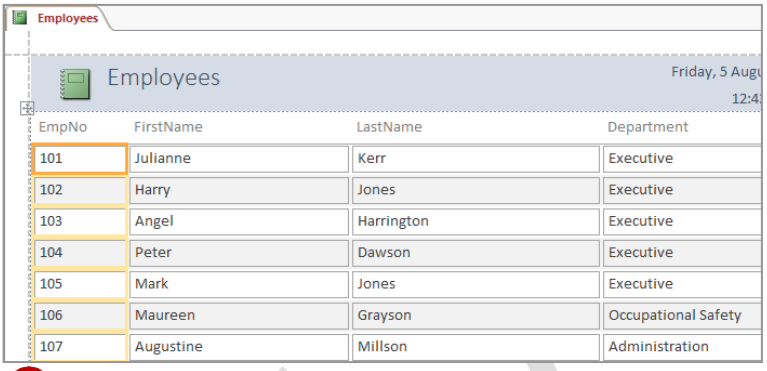
3. On the ***Report Layout Tools: Design*** tab, click on ***View*** in the ***Views*** group to see the report in ***Report View*** where the data is presented

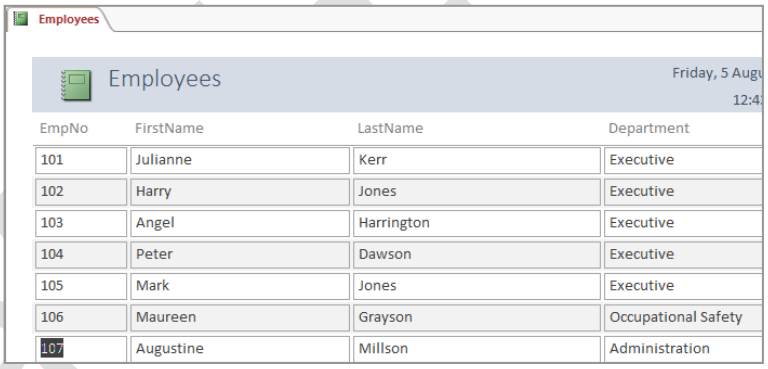
   Data is presented in Layout View as well, but Report View is the finished view of the report…

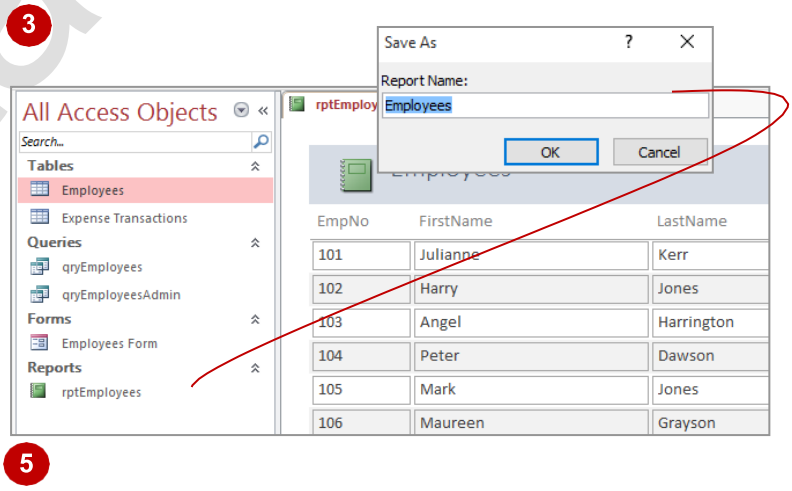
4. Click on ***Save*** in the ***QAT*** to display the ***Save As*** dialog box

5. Type **rptEmployees** in ***Report Name***, then click on **[OK]** to save the design and layout

6. Close the report







For Your Reference…

To ***create*** a ***basic report***:

1. Click on the table or query in the ***Navigation*** pane
2. Click on the ***Create*** tab, then click on ***Report*** in the ***Reports*** group

Handy to Know…

- When creating reports, ***Layout*** view allows you to make changes to the layout of a report, such as column widths, row heights, field placement etc. ***Report*** view is the polished view of the report.

WORKING WITH EXISTING REPORTS

Reports do not contain data – they are simply ***templates*** with field placeholders which determine where data will be placed. As a consequence there are several different views of a report – you can see its structure in both the ***Design*** and ***Layout*** views, and you can see data in ***Report***, ***Print Preview*** and ***Layout*** views.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file Reports_2.accdb...

1. Double-click on the report ***rptEmployees*** to open it

   Report view shows you the report with data. No changes can be made to either the data or the report layout here…

2. On the ***Home*** tab, click on ***View*** in the ***Views*** group to see the report in ***Layout*** view where changes can be made

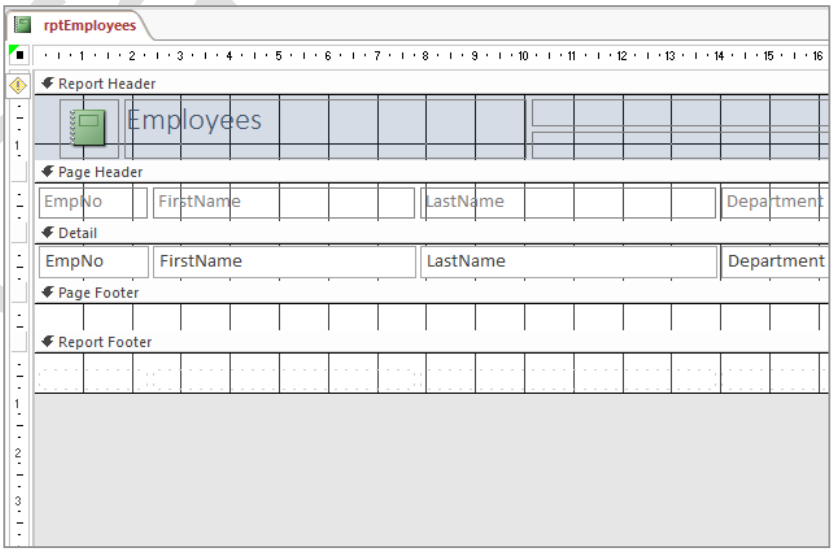
   The View tool toggles between Layout and Report views…

3. Click on the bottom half of ***View*** and select **Design View**

   Design view is the ultimate design and layout view where you can edit the fields, placements and even formats, and also make changes to report headers and footers…

4. Close the report

1



3

For Your Reference…

To ***change*** the ***report view***:

1. Open the report in any view
2. On the ***Home*** tab, click on the bottom half of ***View*** in the ***Views*** group and select the desired view

Handy to Know…

- Changes to report structure are made in either ***Layout*** or ***Design*** view. ***Layout*** view provides a view of the report with data in place. ***Design*** view provides access to more of the detailed areas of the report such as the header and footer.

PREVIEWING AND PRINTING A REPORT

Reports are commonly designed for and printed on paper using a printer. While you can print a report without directly running it, it is a good idea to use ***Print Preview*** to see how it will look before it is sent to the printer. Often you will find that the report is too wide or needs to be changed in some other way prior to a formal print run.

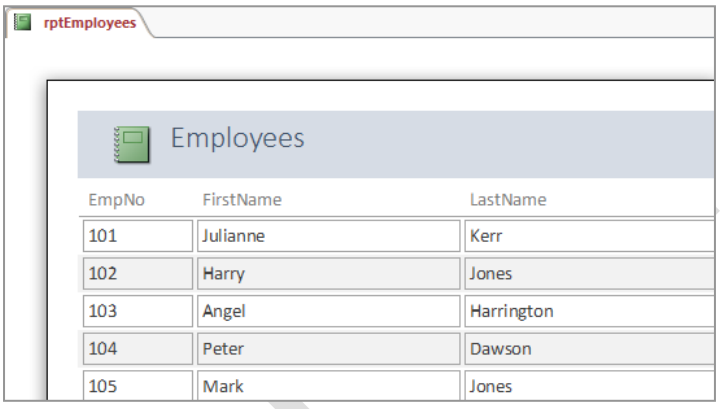
Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Reports_2.accdb...*

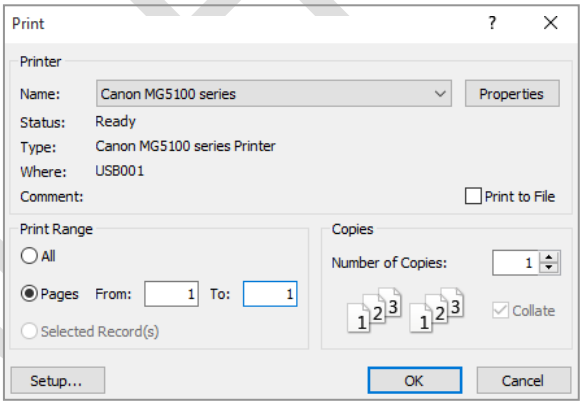
1. Right-click on ***rptEmployees*** and select **Print Preview** to see the report in preview mode
2. Click on ***Next Page*** and ***Previous Page*** at the bottom of the window several times to view the pages

   The report is too wide to fit on one piece of paper…
3. On the ***Print Preview*** tab, click on ***Landscape*** in the ***Page Layout*** group to turn the report sideways

   We still haven't got all columns on one page, but let's print just the first page to see how it looks…
4. Click on ***Print*** in the ***Print*** group to display the ***Print*** dialog box
5. Click on ***Pages*** in ***Print Range*** and type **1** in both ***From*** and ***To***
6. Click on **[OK]** to print the first page of the report
7. Close the report



1



5

For Your Reference…

To ***preview*** and ***print*** a ***report***:

1. Right-click on the report in the ***Navigation*** pane and select **Print Preview** to see the report in preview mode
2. On the ***Print Preview*** tab, click on ***Print*** in the ***Print*** group to print the report

Handy to Know…

- Basic reports seldom print well without a bit of editing. Typically there may be too many columns or rows to fit neatly on a page.

CHANGING THE REPORT LAYOUT

The ***Layout*** view provided for reports in Access allows you to make adjustments to the layout of the report. These adjustments may be required for aesthetic purposes, to make the report more visually appealing, or for practical purposes such as trying to squeeze the report onto one page. In ***Layout*** view you can adjust column widths and instantly see whether they will work or not.

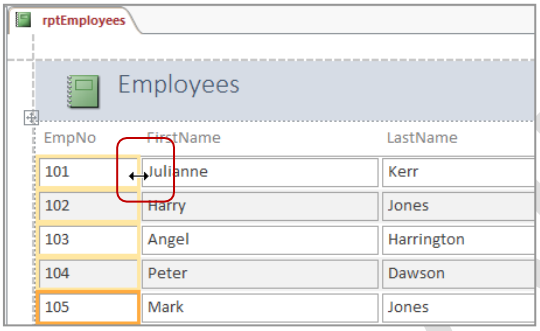
Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Reports_3.accdb...*

1. Right-click on ***rptEmployees*** and select ***Layout View***
2. Point to the right border of the orange square surrounding ***Emp No 101***

   The pointer should change to a double-headed arrow…
3. Hold down the left mouse button and drag the border left to make the column narrower
4. Click in the ***FirstName*** column, then repeat steps ***2*** and ***3*** to make this column narrower
5. On the ***Report Layout Tools: Design*** tab, click on the bottom half of ***View*** in the ***Views*** group, select **Print Preview**, then click on ***One Page*** in the ***Zoom*** group to see if the ***Comments*** fit on the page
6. Click on ***Close Print Preview*** in the ***Close Preview*** group, then repeat steps ***2*** and ***3*** with the other columns, until the ***Comments*** column is on the page
7. Save and close the report

2



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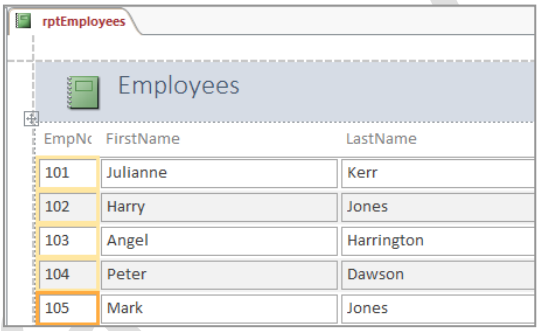

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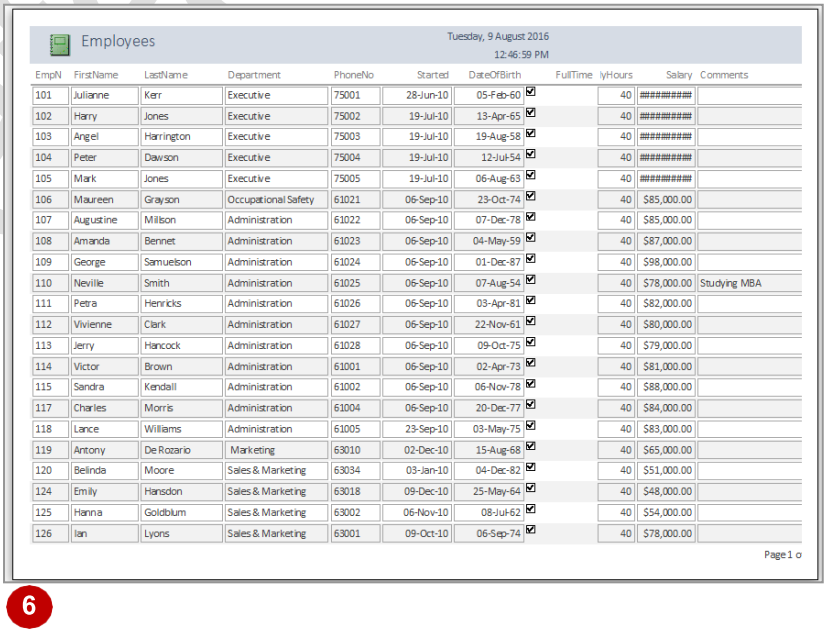


For Your Reference…

To ***adjust column width*** in a report:

1. Open the report in ***Layout*** view
2. Click in the column to change
3. Point to the right border of the orange square, hold down the left mouse button and drag left to narrow the column

Handy to Know…

- The grey dotted lines that appear in ***Layout*** view of a report indicate whether the page will break when printed. These dotted lines are based on the current printer settings on your computer and are very useful when trying to resize a page of the report.

USING THE REPORT WIZARD

The ***Report Wizard*** will guide you through the process of creating more formal reports from the data in your data table. The ***Report Wizard*** consists of a number of screens that prompt you for the information required to generate a report. Some of the screens may seem cryptic to begin with, but you will soon learn what is required and be able to generate reports quickly and efficiently.

Try This Yourself:

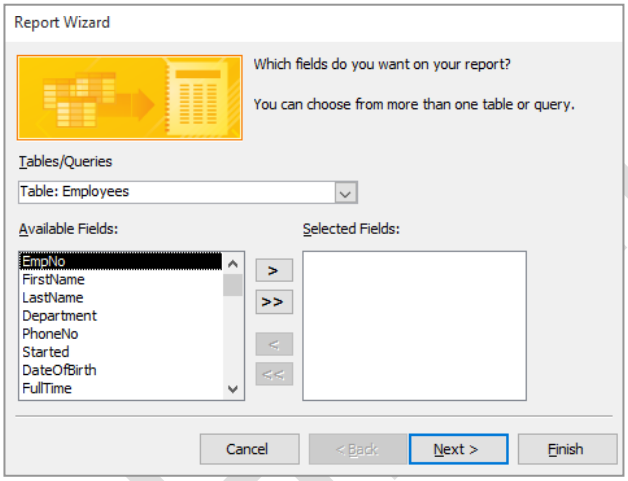
Same File — *Continue using the previous file with this exercise, or open the file Reports_4.accdb...*

1. In the ***Navigation*** pane, click on the ***Employees*** table to specify the table to report on
2. Click on the ***Create*** tab, then click on ***Report Wizard*** in the ***Reports*** group to start the ***Report Wizard***
3. Double-click on ***EmpNo***, ***FirstName***, ***LastName***, ***Department*** and ***PhoneNo*** in ***Available Fields*** to add them to the ***Selected Fields*** list
4. Click on **[Next]** to proceed to the next screen. Continue working through the screens using the settings as shown
5. Once you have specified the title in the last screen of the wizard, click on ***Preview the report***, then click on **[Finish]** to build the report

   Spend a moment previewing the report…
6. Close the report

   The new report is now listed in the Navigation pane

2



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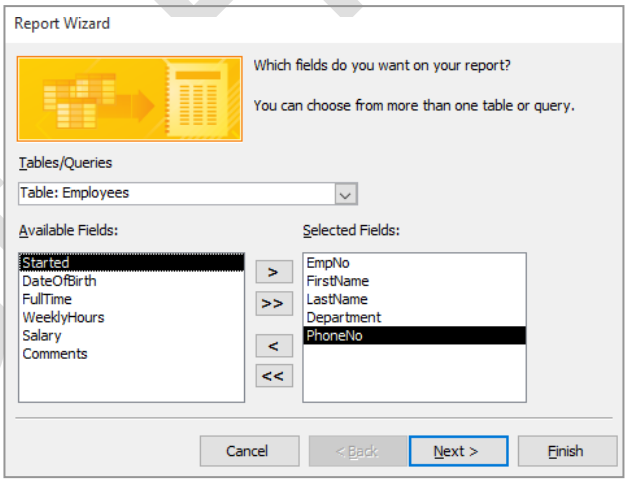


Screen	Settings	Click on…
Grouping	No change	**[Next]**
Sort Order	1. LastName, Ascending	**[Next]**
Layout	Tabular & Portrait	**[Next]**
Title	Employee Phone Listing	

For Your Reference…

To ***create*** a ***report using*** the ***Report Wizard***:

1. Click on the table or query
2. Click on the ***Create*** tab, then click on ***Report Wizard*** in the ***Reports*** group
3. Complete the steps of the ***Wizard***

Handy to Know…

- When creating a report using the ***Report Wizard***, if you have made a mistake in any of the screens or would simply like to review your work, click on **[Back]** to move back through previous screens.

CREATING A GROUPED REPORT

By creating a ***grouped report*** you can present data so that it is grouped according to one or more fields. For example, if you create a grouped report listing all employees by department, the departments will be listed in alphabetical order and the employees will be listed in alphabetical order within each department.

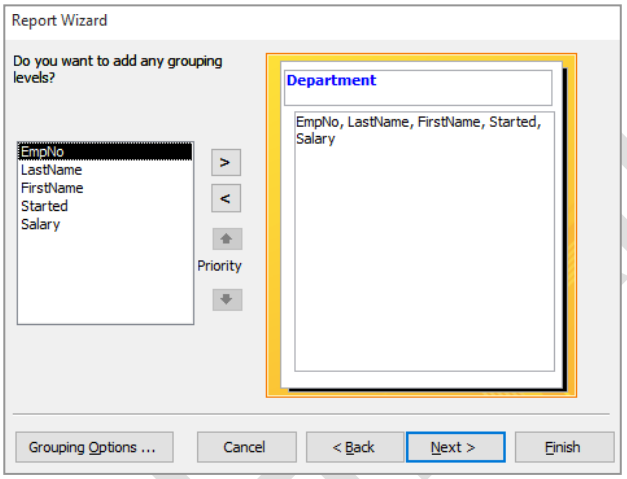
Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Reports_5.accdb...*

1. In the ***Navigation*** pane, click on the ***Employees*** table
2. Click on the ***Create*** tab, then click on ***Report Wizard*** in the ***Reports*** group to start the ***Wizard***
3. Double-click on ***Department***, ***EmpNo***, ***LastName***, ***FirstName***, ***Started*** and ***Salary***, then click on **[Next]**

   In this screen you are required to specify how to group the records…
4. Double-click on ***Department*** as the grouping level
5. Click on **[Next]** and complete the remaining wizard screens as shown
6. Click on **[Finish]** to build the report
7. Close the report

4



5

Screen	Settings	Click on...
Sort Order	1. LastName, Ascending	**[Next]**
Layout	Stepped & Portrait	**[Next]**
Title	Employee Salary Listing	

6

For Your Reference…

To ***create*** a ***grouped report***:

1. Click on the ***Create*** tab, click on ***Report Wizard*** and create a report, selecting the field to be grouped on as the first field
2. Select this field on the ***Grouping*** screen
3. Complete the wizard and save the report

Handy to Know…

- When creating a grouped report, you may find that you need to make minor adjustments to column widths in ***Layout View*** to be able to see all of the grouping column.

CREATING A STATISTICAL REPORT

One great feature of reports is the ability to summarise the data in the database. For example, reports allow you to calculate the total (sum), minimum, maximum, average, and number of records (count) for numerical fields in a database. You can also count non-numerical fields. These ***statistical reports*** assist with analysis of the data in the database.

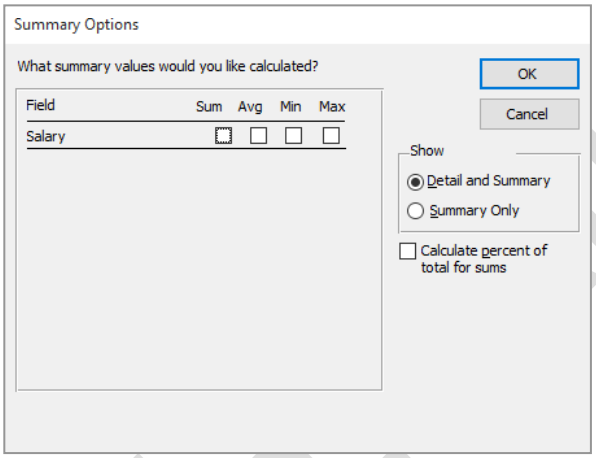
Try This Yourself:

Same File — *Continue using the previous file with this exercise, or open the file Reports_6.accdb...*

1. In the ***Navigation*** pane, click on the ***Employees*** table, click on the ***Create*** tab and click on ***Report Wizard*** in the ***Reports*** group
2. Double-click on ***Department*** and ***Salary***, then click on **[Next]**
3. Double-click on ***Department*** as the ***Grouping*** level, then click on **[Next]**
4. Click on **[Summary Options]** to display the ***Summary Options*** dialog box
5. Click in the tick boxes for ***Sum***, ***Avg***, ***Min*** and ***Max***, then click on ***Summary Only*** in ***Show***
6. Click on **[OK]** to return to the Wizard, then click on **[Next]** and complete the settings as shown
7. Click on **[Finish]** to build the report

   We will fix the hash signs in the next exercise…
8. Close the report

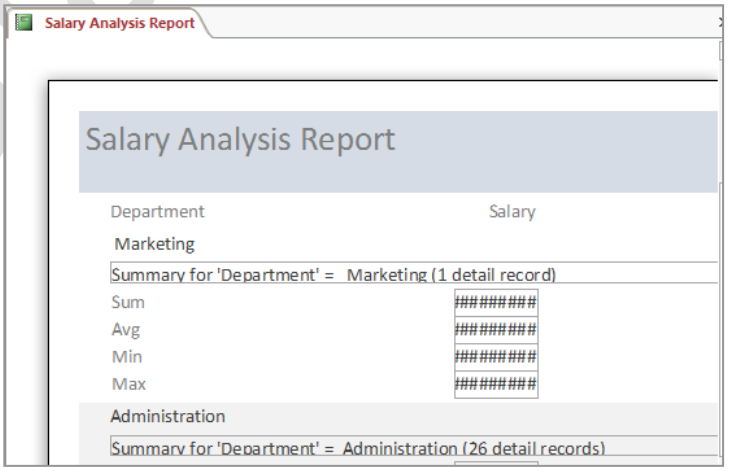
4



6

Screen	Settings	Click on…
Layout	Stepped & Portrait	**[Next]**
Title	Salary Analysis Report	

7



For Your Reference…

To ***create*** a ***statistical summary report***:

1. Create a grouped report using the wizard
2. Click on **[Summary Options]** on the sorting screen
3. Click on the statistics required then click on **[OK]** and finish creating the report

Handy to Know…

- When a report displays hash signs (####) in lieu of numbers, it is because the column size in the report isn't large enough to display the values in the fields.

WORKING WITH GROUPED REPORTS

If a column is not wide enough to display values, Access will substitute the values with cryptic signs like the hash ***(#)*** symbol. This can happen when using the statistical functions (***sum***, ***avg***, etc.) on the values that involve many numbers, such as currency. To correct this problem you will need to access either ***Layout View*** or ***Design View*** and modify the column widths.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file Reports_7.accdb...*

1. In the ***Navigation*** pane, double-click on ***Salary Analysis Report*** to run it

   Here you can see the hash signs replacing numbers…

2. Switch to **Design View**

3. In ***Department Footer***, click on ***=Sum([Sal***, hold down Shift and click on ***=Avg([Sal***, ***=Min([Sal***, ***=Max([Sal*** and ***=Sum([Sal*** (in ***Report Footer***)

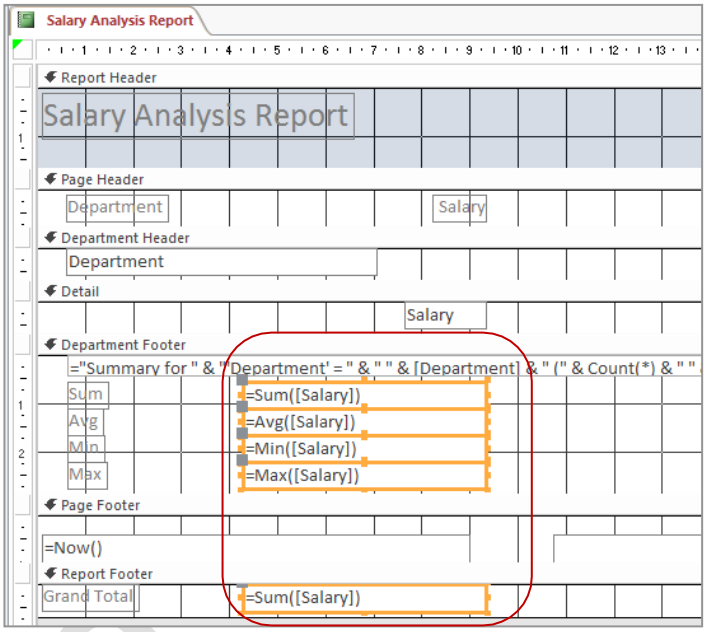
   You should have selected five fields…

4. Point to the left border of one of the selected fields, click and drag to the left until the fields are about 3 times as long

5. Click on the ***Home*** tab, click on the bottom half of ***View*** in the ***Views*** group, then select **Report View** to run the report – this time the values are displayed

6. Save and close the report

3



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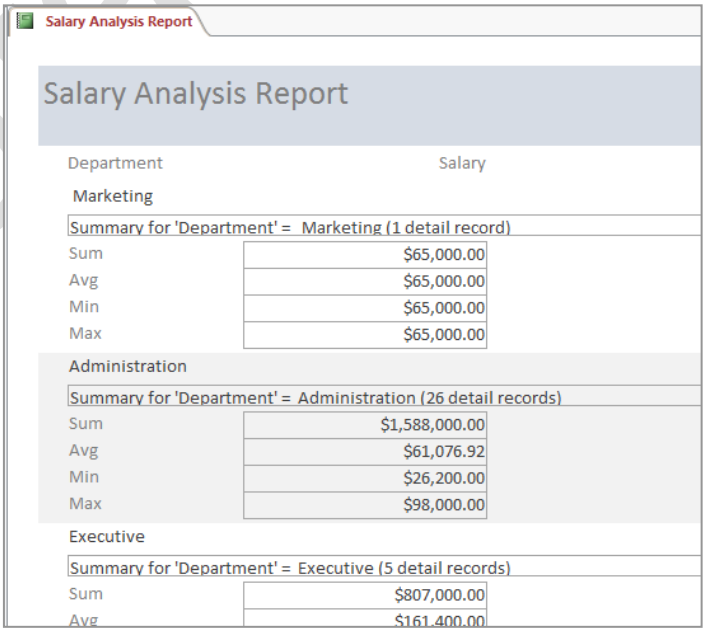

For Your Reference…

To ***modify the layout*** of a ***grouped report***:

1. Open the report in either ***Report Layout*** or ***Report Design*** view
2. Make the changes to the layout as required

Handy to Know…

- You can adjust field widths either through ***Report Design*** view or in ***Report Layout*** view. However, ***=Sum*** (that sums the footer) is easier to access in ***Report Design*** view.