

Access Reports



Instructional Services at KU Libraries
A Division of Information Services

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Abstract: This document introduces users to Reports. Participants will learn how to create Reports via AutoReport and the Report Wizard. They will also learn how to design and modify reports in design view with the help of the Toolbox toolbar. This workshop also teaches participants how to create grouped sections, calculated fields, and sort information in reports.

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Introduction

Microsoft Access XP is a relational database management system. This type of database allows a user to store, retrieve, manage and analyze data quickly and effectively. This workshop introduces a new database object: reports. Reports allow you to analyze the data you have collected in your database using calculations, sorting and grouping techniques, and print them in an organized format.

Objectives

The goal of this workshop is to introduce participants to the creation of reports in Microsoft *Access*. After today's workshop, participants will be able to:

- Create a report from a table or query using AutoReport
- Create a report from a table or query using the Report Wizard
- Create and modify reports in the Design View using the tools from the Formatting and Toolbox toolbars
- Add grouped sections and sort fields in reports
- Create calculated controls in reports

Prerequisites

It is assumed that the participants in this workshop are familiar with tables, queries and relationships in Microsoft *Access*; have taken *Access: Introduction*, *Access: Intermediate*, and *Access: Forms*; or have equivalent skills.

Related Training Available from Instructional Services

All workshops offered by Instructional Services are free to KU students, staff, faculty, and [approved affiliates](#).

To learn more about or register for workshops, receive automatic announcements of upcoming workshops, and track workshops you've registered for and have attended, visit www.lib.ku.edu/instruction/workshops. For further workshop related questions, please email training@ku.edu.

Introducing Reports

In *Access*, reports are utilized for enhanced record output. They allow you to represent the data through text and/or charts, perform calculations on information, and sort and summarize grouped information.


Using AutoReport

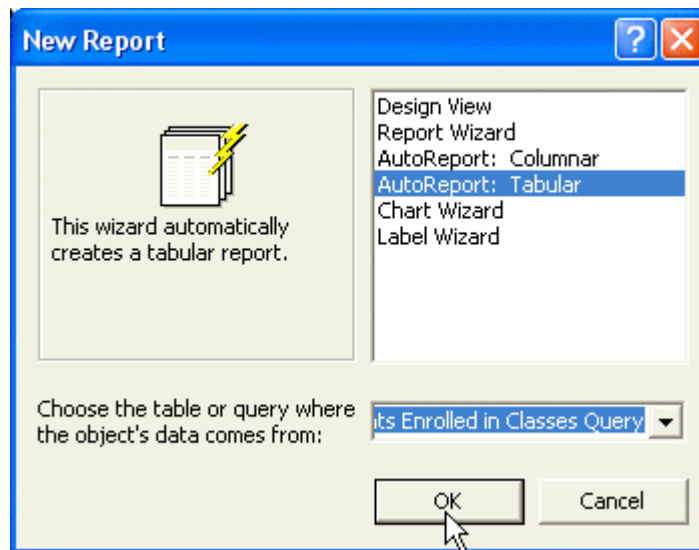
There might be times when you want to quickly create a report with all of the fields from a table or query. Making an **AutoReport** can help you do this. When you create an

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AutoReport, *Access* will automatically add all of the fields to the report from the table or query you create the report from. Here is one way you can create an **AutoReport** in *Access*:


1. Click on the **Reports** button in the object bar in the database window.
2. Click on the **New**  button directly above the object bar.
3. When the **New Report** dialog box opens, choose which of the **AutoReport** options you want in which to create your new report. The options are as follows:



- a) **AutoReport: Columnar**: Creates a new report in a column type format for viewing one record at a time. This is the default format.
 - b) **AutoReport: Tabular**: Creates a report where the fields for each record appears on one line with the field labels at the top of the report.
2. Next, click in the drop down list, Choose the table or query where the objects data comes from:
 3. Once you choose the table or query you want to base the report off of, click OK.
 4. Access will make the AutoReport and add all of the fields to the report for you.



Creating Reports with the Report Wizard

The **Report Wizard** is another way to create a report quickly in *Access*. The **Report Wizard** allows you many different options, such as, choosing multiple tables and/or queries to create a report, selecting which fields you want to appear in the report, adding any grouping levels, sorting, choosing the type of layout you want your report to be in, and what kind of style you want for your report. Here is how to use the **Report Wizard**:

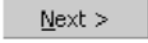
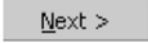
1. Click on the **Reports**  button on the object bar.
2. Double click **Create report by using wizard**.
3. Click on the **Tables/Queries** drop down arrow to choose the first table or query you want to include in your report.

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4. Under the **Available Fields:** column on the left side, there are several ways you can choose to bring a field into the **Selected Fields:** column on the right:
 - a) Double click on each field name.
 - b) Select each field name one at a time, and click on the single arrow  button.
 - c) If you want **ALL** of the fields, click on the double arrow  button.
-




Note: If you want most of the fields in the list, click on the double arrows to pull them all over. Once they are in the **Selected Fields:** list on the right, either double click or click on each field name and click on the single arrow pointing to the left to send back fields you do not want to the **Available Fields:** list on the right. This might save you some time.

1. Repeat steps **3** and **4** for each table and/or query.
 2. Click on the **Next**  button.
 3. Choose any grouping level(s) you want by double clicking on the field names or using the single arrow.
 4. Click the **Next**  button.
 5. Choose one of the layouts for your report along with the orientation:
 - a) Columnar
 - b) Tabular
 - c) Justified
-

Note: If you choose any grouping levels for your report, you will have six different layout options instead of the three you see in step 9 above.

1. Click on the **Next** button.
2. Choose the **Style** or report background you would like.
3. Click on the **Next** button.
4. Type in the **Title** you want for your report. This will be the name of the report that will be displayed in the database window. Click on either one of the following options you want before clicking finish:
 - a) Preview the Report. (default)
 - b) Modify the report's design.
5. Click **Finish**. *Access* will create your report and open it in the view you chose.


Viewing and Editing

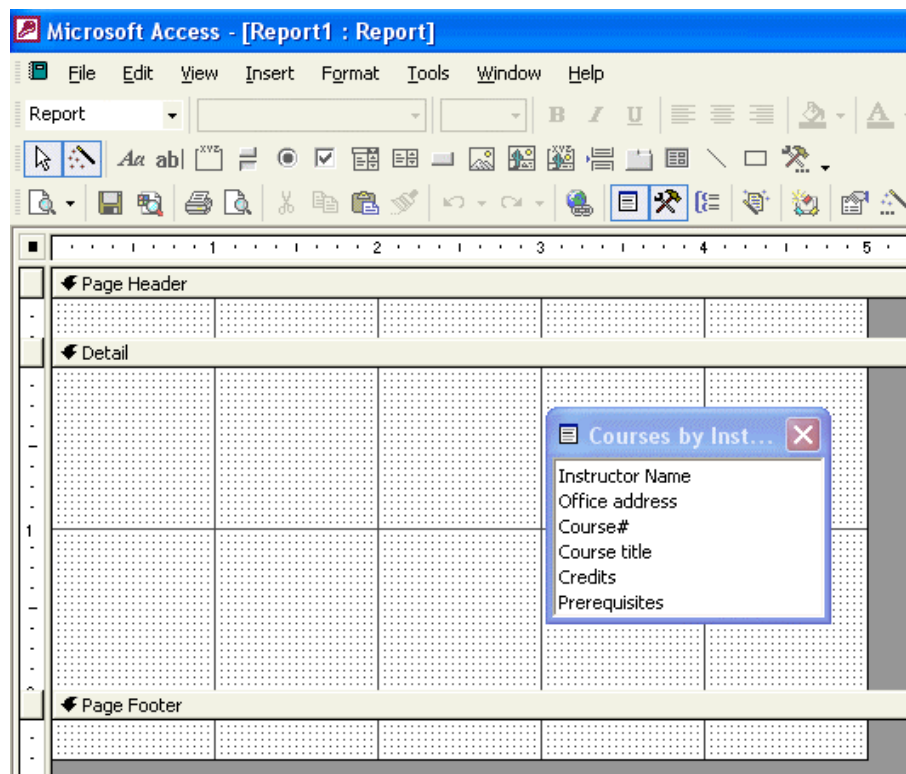
As with all objects in Access, there is a button on the toolbar that allows you to switch back and forth between **Print Preview**  of the report and **Design View** . If you want to make changes to the report, such as changing text in labels; deleting, adding, moving, or resizing labels or controls; and sorting or grouping fields, click the **Design View**  button to edit the report.

Creating a Report in Design View

You also have the option to create reports in **Design View**. This allows you to create the report from scratch, so that you can choose your fields, formats, and layout your information however you like.



To start creating your report in **design view** you can do the following:

1. Click on the **Reports** button on the object bar.
2. Click on the **New**  button above the object bar.
3. In the **New Report** dialog box, choose **Design View**.
4. Click on the drop down arrow beside **Choose the table or query where the objects data comes from:** to pick the table or query you want.
5. Click **OK**.
6. Your new report will open up into **Design View** with the field list displayed.



- Click and drag on the name of the field that you want to add to the report. It will look like a block when you drop it onto your report.

Note: By default, *Access* creates two controls. The control that is bound to the table or query and forms the information from that object will appear on the left and a label for that control will appear on the right. The controls are linked together and can be moved around the report as a unit.

- Repeat step 7 for each field you want to add to your report.
- Click on the **Save**  button or **File**→**Save**.
- Type the name you want to give to your new report over the default name of **Report1**.
- Click on **View** or **Print Preview**  button to see what the report will look like if you were to print it.

Sections of a Report

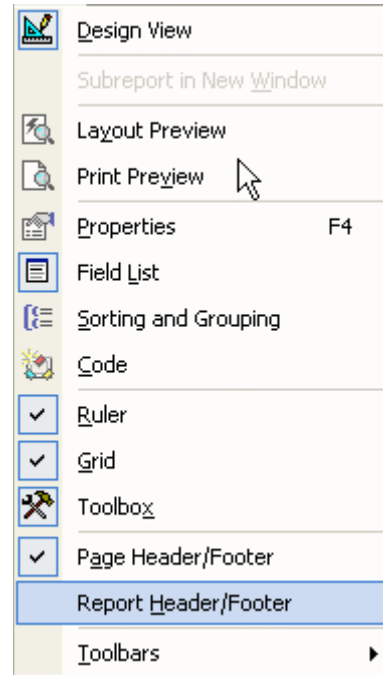
When you start to create your report in design view, you first need to figure out where to place your controls. There are several **sections** you'll find in design view of a report. Each **section** has a specific purpose. They are as follows:

Section	What it Does
Detail	The detail section is used to display records.
Report Header	This section is used for displaying information that remains the same for every record, such as a title for the report and the date and/or time. The information in this section only appears at the top of the first page of a printed report.
Report Footer	The report footer is also used to display information that is the same for every record. The information in this section only appears at the bottom of the last page of a printed report.
Page Header	The page header section can display things such as field headings or titles. The information in this section will appear at the top of each page when printed.
Page Footer	The page footer section can display things such as page numbers. The data in this section will appear at the bottom of each page when printed.
Grouped Header/Footer	This is a special type of section that can be turned on and off through the Sorting and Grouping dialog box. It is used when you need to group on information where it is related through a one-to-many relationship.

Adding and Removing Sections

To add the **Report Header/Footer** or **Page Header/Footer** section to your report, you can do the following:

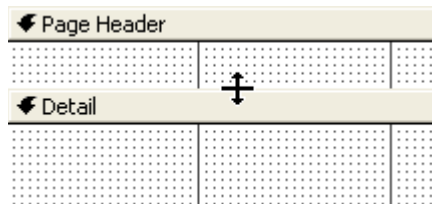
1. Make sure you are in **Design View** of your report.
2. Click **View** → **Page Header/Footer** to turn on those sections.
3. Click **View** → **Report Header/Footer** to turn on those sections.
4. *Access* will place a check beside the sections you turn on.
5. To turn either of those sections **off**, click on the **View** menu again, and click on the name of the one you no longer need.



Note: You can also **right click** with your mouse on the grid in the **Detail section** and click on the name of either section to turn them on or off.

Resizing Sections

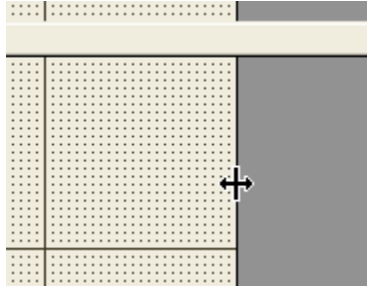
Sometimes you might need to make a section larger or smaller. Increasing the size of a section can allow you to make labels larger or include more fields in your report. To increase the **height** of a section, simply place the mouse pointer on the bottom edge of the section until a double-headed arrow appears with a horizontal perpendicular bar. Click and drag up or down to increase or decrease the section's height.




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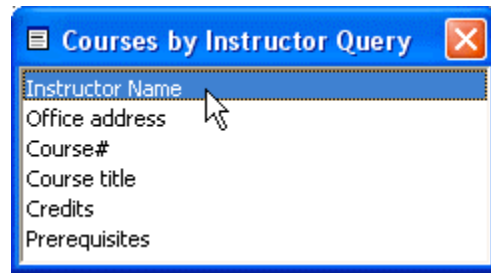
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You can also increase the **width** of all of the sections. To do this, place the mouse pointer along the right edge of the report's background (it doesn't matter which section because this will adjust the entire **width** of the report) until a double-headed arrow appears with a vertical perpendicular bar. Click and drag left or right to increase or decrease the report's width.



Adding Controls

In order to be able to view record information in a report, you'll need to add controls from the **Field List**. The field list contains the fields from the table or query that your report is based on. To add fields from your field list, you'll first have to view the list. You can use the field list  button to turn your field list on and off. Once, the field list is turned on, you are then ready to start selecting controls to add to your report.



Selecting Controls

Whenever you need to rearrange, resize, or format a control in a report, you must first select the control. You'll find that there are several different ways to select a control or multiple controls dependent upon what you need to do. To select a control and/or the control's label, simply click one time on the control or the label. To select multiple controls, try one of the following methods:

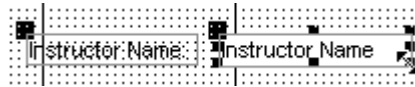
- Select the first control, hold the **Shift** key on your keyboard, and select the remaining control(s).
- Place your mouse in the vertical or horizontal ruler and watch the white pointer change to a black arrow. Click and drag in the ruler to select multiple controls.
- Place your mouse anywhere in the dotted grid in the detail section (or whichever section the controls you're selecting are in). Click and drag with the mouse to box in the controls you want. Once you've boxed in the controls you want, release the mouse click and those fields will be selected.

Once the control is selected, small square boxes (also known as **handles**) will appear around the outside of the selected control with one large square in the upper left corner.



Resizing Controls

One reason for selecting controls is to resize them. The square black handles around the outer edge of the control will allow you to resize the control (make it larger or smaller). Once the control is selected, you can place your mouse pointer on one of these handles. The pointer will change into a double-headed black arrow that will allow you to click and drag to resize the field.



Resize Handle

Moving Controls

Another reason for selecting controls is to move them. You can move

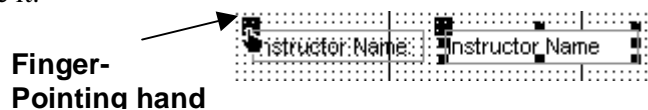
- A single control along with its label
- A single control without its label
- Multiple controls with their labels



To move a single control along with its label or multiple controls with their labels, you must use the **hand**. When you select the control(s) that you want, along with the handles a rectangle box will appear around the control. When your mouse pointer is on one of the lines of the box, the pointer appearance will change to an **open hand**. When you see the open hand, you can click and drag and move the control(s) where you want them to be.



Open hand

To move a control without its label (or vice versa), when you click on the field to select it, you will see a large black box (also known as a **move handle**) appear in the upper left corner of the field. When you place your mouse pointer over the move handle, the pointer will change to a **Pointer-finger hand**. You can then drag the control or label to move it.



Note: If you want to move a control or label to a different section, you will have to select the control or label you want to move, click on the **cut**  button, click anywhere in the background of the section you want to place the field in, and click on the **paste**  button. The pasted field will always appear in the upper left corner of the section and already be selected for you to reposition the field.

Formatting Controls


Whenever you add controls to your report, you might want to be able to change the font, font color, size, or etc. The easiest way to do is via the **Formatting Toolbar**.

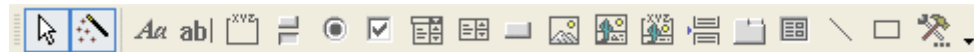


However, before you can format the control, you must first select it by click on the outer edge of the box to select it. Once you've done that, the **Formatting Toolbar** will light up for you to choose your options.

Note: Don't forget that you can format more than one control at a time. Simply use one of the selection methods to select all of the controls you want formatted the same, and then format them.

Other Types of Controls

Sometimes, there might be other types of controls you'll want to use to enhance your report. Some of these controls could be labels, images, lines, and rectangles. In order to add these types of control, you'll need to utilize the **Toolbox Toolbar**. To turn the toolbox toolbar on, you'll want to click on the **toolbox**  button. Once the button is clicked on, the **toolbox toolbar** should be displayed,



Button	Function
Select objects	Clicking on this button returns the mouse to a pointer to allow you to click on objects and select them.
Control wizards	When selected, you can select some other tools from the toolbox toolbar and a wizard will run.
Label	A control that allows you to type in text (like a text box in Word or PowerPoint).
Text box	A control, which will have a label attached to it that allows you to create bound or unbound fields that could be used to concatenate fields, do calculations, enter or edit data, or accept user input.
Option group	A frame with a set of options and labels in which the user can only choose one option. An option group can be bound to a single field in a table or query. The data type of the field must be number , and when the option is chosen, Access will store a number in the underlying table or query that corresponds to the choice made. Check boxes, toggle buttons, and option buttons can be used in an option group.

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Button	Function
Toggle button	A toggle button can be used to indicate an “On/Off”, “Yes/No”, or “True False” condition. They can be used within option groups or as a stand-alone control and be bound to a Yes/No datatype field in a table or query. When the button is pressed in, it indicates a Yes, On, or True. When the button isn’t pressed in, it indicates a No, Off, or False. Whichever option is displayed in the table or query is determined by the field’s format property.
Option button	An option button can be used to indicate an “On/Off”, “Yes/No”, or “True False” condition. They can be used within option groups or as a stand-alone control and be bound to a Yes/No datatype field in a table or query. When the option button is selected, it indicates a Yes, On, or True. When the button isn’t selected, it indicates a No, Off, or False. Whichever option is displayed in the table or query is determined by the field’s format property.
Check box	A check box can be used to indicate an “On/Off”, “Yes/No”, or “True False” condition. They can be used within option groups or as a stand-alone control and be bound to a Yes/No datatype field in a table or query. When the box is checked, it indicates a Yes, On, or True. When the box isn’t checked, it indicates a No, Off, or False. Whichever option is displayed in the table or query is determined by the field’s format property.
Combo box	A Combo box is like a text box and a list box combined. You can usually either choose an option from the drop-down list in the box, or you can type in your own, dependent upon the Limit to List property. Combo boxes can have multiple columns in which one of the columns is bound to fields in tables or queries, but can also be bound to SQL statements. You can use unbound combo boxes to find a record based on the value you select.
List box	A List box can contain multiple columns and is good for short lists of information. The user can scroll through the list box or choose one item from a list box. A user cannot type in a list box or choose an option that’s not there.
Command button	Command buttons are useful when you want a user to be able to click, double click, or use the mouse in some other way to make something happen, such as print a form or look for information inside of a form. You can use the Control Wizard to take you through a wizard and help you create a command button or you can create one on your own using VBA (Visual Basic for Applications). Access will create an Event Procedure whether you utilize the wizard or do it manually, and you can always modify the procedure in the VBA editor as needed.
Image	Used to add pictures to forms and reports. Good for logos and


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Button	Function
	other types of graphics.
Unbound object frame	Use this tool when you need to add an object to a form or report and you want to be able to edit the object inside of the form or report. The information or value from this type of object is not stored in a table.
Bound object frame	Use this control to display and edit OLE (Object Linking and Embedding) objects stored in tables.
Page break	When used in forms with Form View, this tool will mark to where the form scrolls when you use the Page Up and Page Down keys. Use it to begin a new page on a printed form or report.
Tab control	This tool allows you to insert tabbed pages into your form to create pages that you can use to help break up your controls. This is useful when you have a lot of controls to work with that can be separated into different categories.
Subform/Subreport	Utilize this tool when you want to nest a related form or report inside of a main form or report. These are helpful when you want to show data from tables or queries that have a one-to-many relationship.
Line	Use this tool to draw lines in forms and reports to separate sections or call attention to certain areas. Use the Shift key to help keep lines straight when drawing them in.
Rectangle	This tool is for drawing rectangles around a group of controls, such as when you want to keep them together or group them as one object. It's also good to use when you want to emphasize important information in a control.
More controls	This button will take you to more controls that you can use.

Adding Controls from the Toolbox

Dependent upon which type of control you add from the **Toolbox** toolbar, depends on whether or not you'll go through a **Wizard**. A wizard is a step-by-step process that prompts you for the information you'll need to make the control work. For example, say you want to add a subreport to your report. You can use the **Subform/Subreport**  button in conjunction with the **Control wizard**  button to build the subreport. Having a subreport in a main report is useful because it allows you to view related data from two or more tables.

There might be times where you need a title in the report header. Having a title in a form or report lets others know what the form or report is being used for. Using the **Label**  button is how you can make titles or labels for other objects.

There is also a **Text Box**  button. This button allows you to make controls such as calculated controls. These can be very useful, especially when you need to add controls together and have a value returned, but don't want the value stored in the underlying table or query.

These are just a few things that the Toolbox can do for you. To use one of these or other options from the Toolbox, you can do the following:

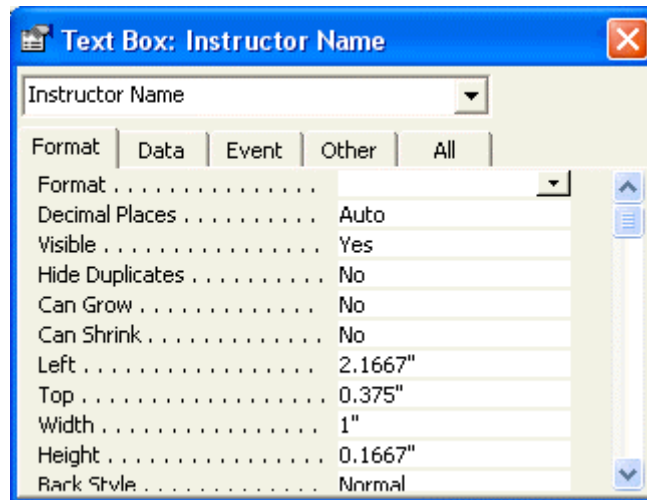
1. Make sure the Control Wizard button is on or off, as needed.
2. Click on the button that you want to use.
3. Click in the section of the report where you want to place the button.
4. If a wizard appears, follow the prompts of the wizard; otherwise type in the control to create the field you need.

Modifying Properties


Whenever you add controls to a report, you might find you'll need to change some of the properties of the controls or the report itself to make it easier to read and use. For example, you might need to create a calculated field that needs to have a currency format. After creating the calculation, you can open up the **Properties Box** for that control and change the **Format** property on the **Format** tab to currency.

Changing the **Name** property in the property box for each of the controls can aid in distinguishing between different controls.

To open the property dialog box for a control, simply double click on the control when in Design or Datasheet View.



Every object in a report will contain properties; therefore, the property box will always contain the following tabs: **Format, Data, Event, Other, and All**. However, not all controls will have the same properties and some of the tabs might not have any properties, dependent upon which object's properties you're trying to see.


Once you're finished modifying the properties of a control, you can click on the  in the corner to close the box. If you simply want to see properties for a different control, you can locate the control and click on it without having to close the box. The property box will change to the selected object's properties automatically.

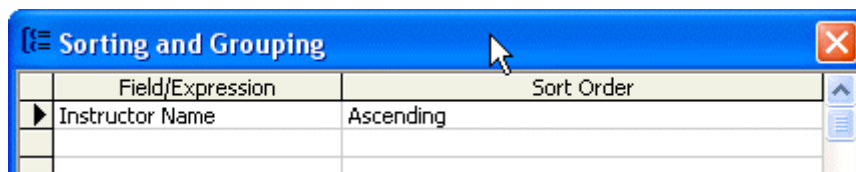
Sorting and Grouping Records

When you create a report in *Access*, you have a couple of options when it comes to sorting and grouping. You can either sort data without adding any groups, or you can group and sort your data.

Note: If you choose to group your data, you will be given the choice to sort the information in an ascending or descending order. You do **not** have a not sorted option.

Sorting Records

If you just want to sort the information in your report by one or more fields, you can simply click on the **Sorting and Grouping**  button. When you do this the sorting and grouping dialog box will open.



In the first column, click in the first field and then click on the drop down arrow. You'll see a list of field names you can choose from. Once you have chosen a field, the word **Ascending** will automatically appear for you in the second column. If you want to change the sort to a descending sort, click in the right column where the word ascending appears, click on the drop down arrow, and choose descending.

Note: You can sort by any field you want to. It does not have to be a field that you actually included in the design of the report.

Grouping Records

If you want to group by a the data from one or more fields, you can click on the Sorting and Grouping button which will open the Sorting and Grouping dialog box.

This dialog box not only allows for sorting only, it also allows you to group alike data together. For instance, if you have many students that are taking classes and you want to see the student's name appear one time with all of their class information listed underneath, you could group by the student's ID number (or whatever primary key field you used to identify the student). Here's how:

1. In Design View of your report, click on the Sorting and Grouping button.
2. In the first column of the sorting and grouping dialog box, click in the first cell and click on the drop down arrow.

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3. Choose the field you want to group by.
4. In the properties in the bottom of the box, notice the **Group Header** and **Group Footer** properties both say “No.” Change at least **one** of these properties to yes by clicking in the cell, clicking on the drop down arrow, and choosing “Yes.”



5. Once Step 4 is complete, you can either change the other properties or close the dialog box.

Note: You should notice a group header and/or group footer section appear in the design of your report. The name of the section will be whatever field you used to group with the word “Header” or “Footer” appearing after it.

6. Add the appropriate field(s) to the section. For example, if you group by the Student ID field in the sorting and grouping box, you might add the Student’s first and last name fields to the grouped header. This ensures that their name will only appear one time in the report.
7. Add the fields you want to view each record for to the Detail Section of the report. For example, if you want to see all of the classes each student is enrolled in, you would add a class title field or whichever field contains that information.
8. Click on the **Save**  button to save your changes.

Creating Calculated Field


Because reports are often used to not only organize and enhance the information contained in your database, but also to analyze and summarize your information, there might be times when you need to create calculated fields. Calculated fields can be fields that do an actual arithmetic calculation, such as multiplication or subtraction; they can be fields that use a function, such as Sum or Average; or they can be a field that combines, also called concatenating, fields, such as a first name and last name field. To create a calculated field, you use the Text Box button on the Toolbox toolbar. Here’s how:

1. Click on the Text Box button on your Toolbox toolbar.
2. Click and drag to draw the control in the section you want to perform the calculation.

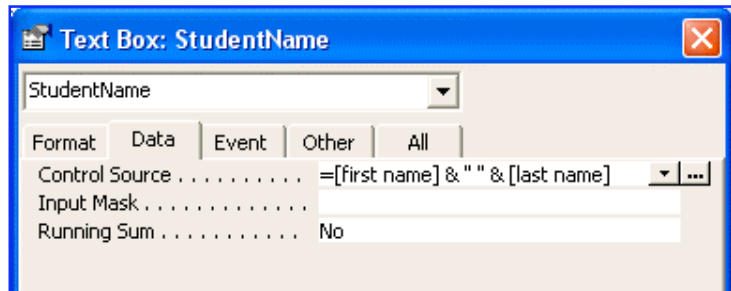
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Note: Dependent upon where you place the control depends upon what it will use to do the calculation. For example, if you want a calculation performed based on a group, you would put the field in the group header or footer. If you want a calculation to be performed for every detail record of the report, such as if you wanted a grand total, you would put the control in the Report Footer.


3. Click on the **Properties**  button on the Report Design toolbar.

4. In the Properties dialog box, click on the **Data** tab. Use the **Record Source** property to build the calculation.



Note: You can use the **Build**  button if you want to see what type of built in functions Access has for you to use. Also, you can simply click inside of the control and type in the calculation without going through the properties dialog box.

5. Once you've finished creating the calculation, click on the corner  to close the Properties box.

6. Change the text in the label for the calculated control and click on the **Save**  button to save your changes.

7. Click on the **Print Preview** or **View**  button to view your report and see your calculation(s).

Getting Additional Help

The Help Desk provides consulting and Q&A help in a variety of ways:

785/864-0200

question@ku.edu

www.ku.edu/~helpdesk

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