



## Continuing Education-- Access

Session No # 4  
File: Access 4.doc

Date: December 15, 2010  
Tom Gerfen, CSIS Professor

Class Notes:

Class web site: [infotwg.com](http://infotwg.com)  
**Review & Questions Terminology**

Evaluations



You must name a file before you can start

MS Access file names = *filename.ACCDB*

Creating Tables

Fields Names and Field / Data Types

Field Properties / Attributes

Field Name	Data Type	Description
	▼	

Text	Auto Number
Memo	Yes / No
Number	OLE Object
Date / time	HyperLink
Currency	Lookup Wizard



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Class Notes:

Field Properties / Attributes / Options

Switch to this **F6**

General	
<b>Field Size</b>	
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
<b>Required</b>	(Yes / No)
Allow Zero Length	(Yes / No)
Indexed	
... more	

To see how a selected mask works, use the Try It box.  
To change the Input Mask list, click the Edit List button.

Input Mask:	Data Look:
Phone Number	(206) 555-1212
Social Security Number	831-86-7180
Zip Code	98052-6399
Extension	63215
Password	*****
Long Time	1:12:00 PM

Try It:



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Class Notes:

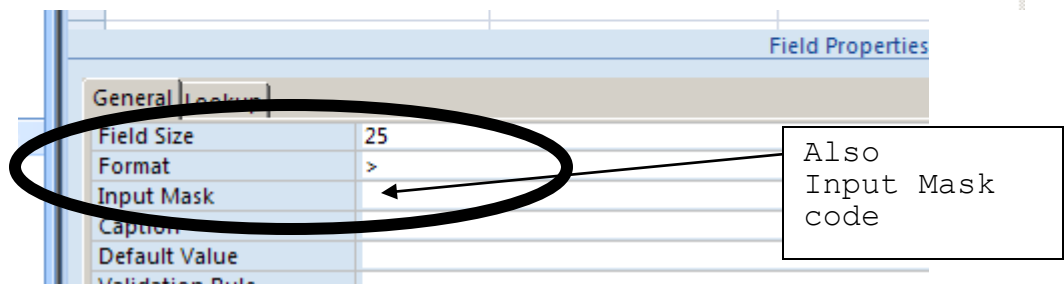
### CODES for the FORMAT field

Know more about characters that define input masks

The following table lists the placeholder and literal characters for an input mask and explains how it controls data entry:

CHARACTER	EXPLANATION
0	User must enter a digit (0 to 9).
9	User can enter a digit (0 to 9).
#	User can enter a digit, space, plus or minus sign. If skipped, Access enters a blank space.
L	User must enter a letter.
?	User can enter a letter.
A	User must enter a letter or a digit.
a	User can enter a letter or a digit.
&	User must enter either a character or a space.
C	User can enter characters or spaces.
. , : ; - /	Decimal and thousands placeholders, date and time separators. The character you select depends on your Microsoft Windows regional settings.
>	Converts all characters that follow to uppercase.
<	Converts all characters that follow to lowercase.
!	Causes the input mask to fill from left to right instead of from right to left.
"	Characters immediately following will be displayed literally.
""	Characters enclosed in double quotation marks will be displayed literally.

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Examples:

All Caps

>

Numbers & Letters all Caps

999LLLLL



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Class Notes:

# QBE Query By Example

### Sorting

Ascending or Descending or None

### Show

Show the field  Yes  or No

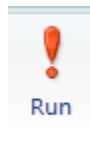
### Expression / Criteria

>	=>	AND
<	=<	OR
=	<>	NOT
& [ ]	:	

### WILDCARDS

- \* Matches any number of characters
- ? Matches any single character
- [ ] Matches any single character within the brackets
- ! Matches any character NOT in brackets
- Matches any one of a RANGE or characters
- # ] Matches any single numeric character

**To Run a QBE use the !**



### Criteria

- Date #mm/dd/yy#
- "xx text xxxxxx"
- Like "xttextxxx"
- Like "xxxxx\*"
- Like "\*xxxx"
- Like "[ A - G ]\*"

Between ..... and .....



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Class Notes:

### Q U E R Y

Field			
Table			
Sort			
Show	<input type="checkbox"/>		
Criteria			
or			

Examples:

"Books"		"111" or "444"
"Books" or "Bikes"		
> 25.99		Like "#1*/97#"
> #12/25/95#		
Like "B*al"		
Like "Ar*"		
Like "!!!!"		

## Terms

**Characters**

**Fields (columns)**

Field names are 1 - 64 characters

**Record (rows)**

A collection of fields. A group of related fields treated as a unit of information.

**Table**

A collection of records

**Database**

A collections of information organized in tables and stored electronically in a file

Areas or Objects available in MS ACCESS

Areas

Tables

Queries

Forms

Reports



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Class Notes:



You must name a file before you can start

MS Access file names = filename.ACCDB

Creating Tables

Fields Names and Field / Data Types

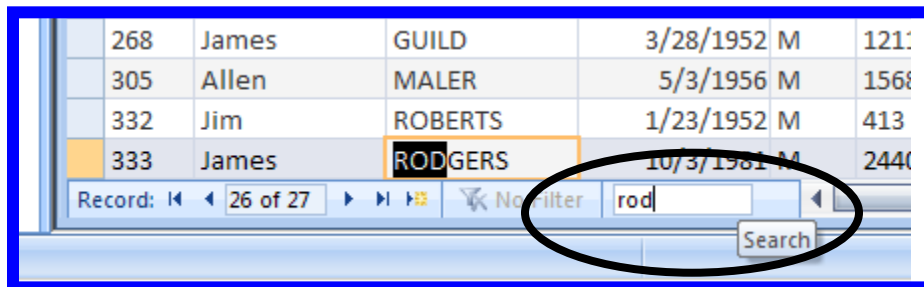
Field Properties / Attributes

Field Name	Data Type	Description
	▼	

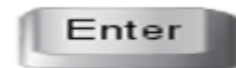
- |             |               |
|-------------|---------------|
| Text        | Auto Number   |
| Memo        | Yes / No      |
| Number      | OLE Object    |
| Date / time | HyperLink     |
| Currency    | Lookup Wizard |

### Database Tools

Search Tool



Press ENTER to find the next record





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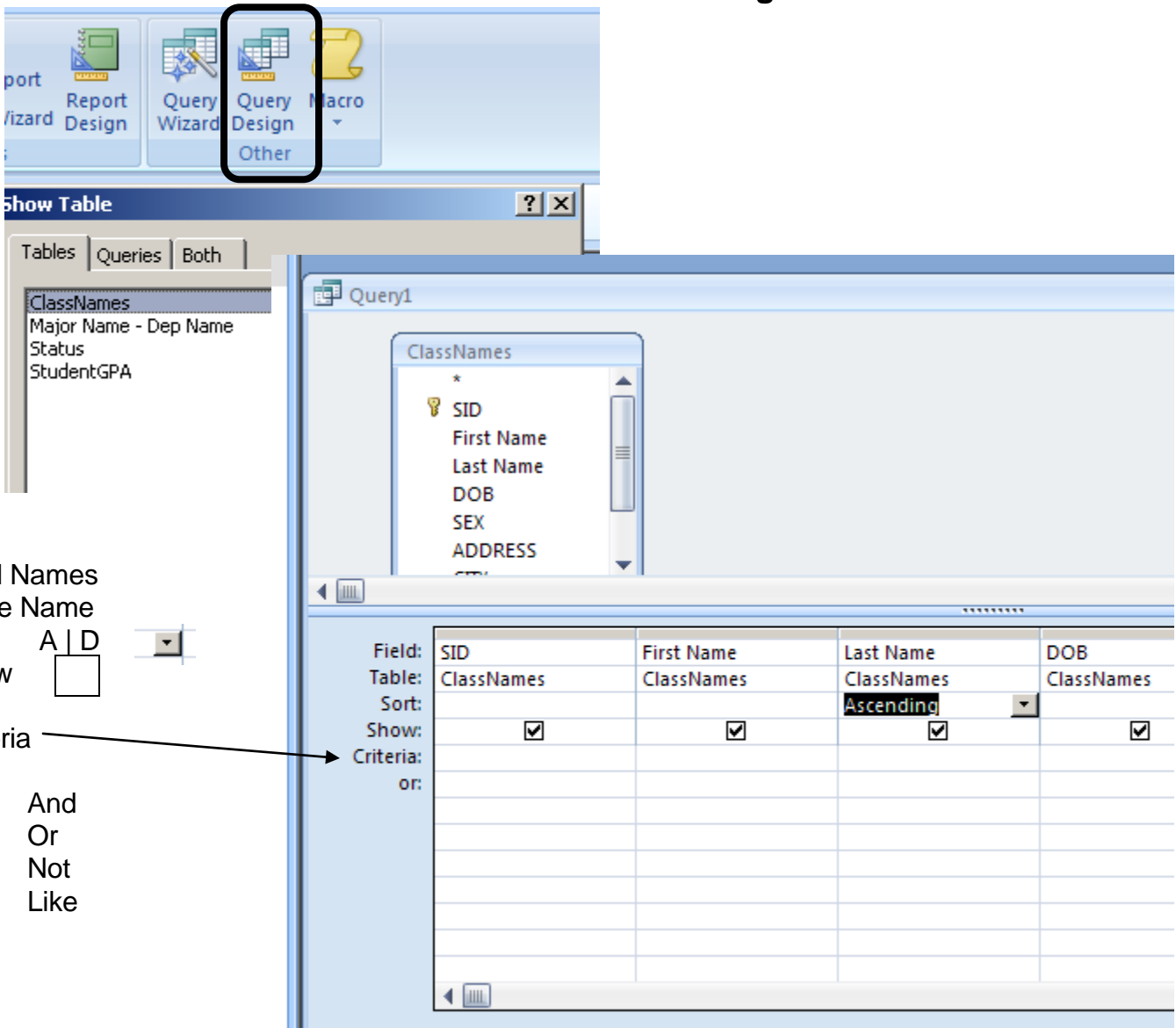
Date: December 15, 2010  
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Class Notes:

### CREATE

### Create a QUERY

### Design



The screenshot shows the Microsoft Access Query Design view for a query named 'Query1'. The design grid is as follows:

Field:	SID	First Name	Last Name	DOB
Table:	ClassNames	ClassNames	ClassNames	ClassNames
Sort:			Ascending	
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:				
or:				

Annotations in the image include:

- A red box around the 'Query Design' button in the ribbon.
- An arrow pointing from the 'Criteria' label to the 'Criteria' row in the design grid.
- Labels for 'Field Names', 'Table Name', 'Sort', and 'Show' with corresponding input fields.
- A list of criteria options: 'And', 'Or', 'Not', and 'Like'.

Sample Query



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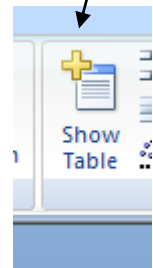
**Class Notes:**

2 Tables (Data)

The Link between the 2 tables

Field:	First Name	Last Name	SID	GPA
Table:	ClassNames	ClassNames	ClassNames	StudentGPA
Sort:		Ascending		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:				
or:				

Add an additional table to the Query



**Join Properties**

Left Table Name: ClassNames      Right Table Name: StudentGPA

Left Column Name: SID      Right Column Name: SID

1: Only include rows where the joined fields from both tables are equal.  
 2: Include ALL records from 'ClassNames' and only those records from 'StudentGPA' where the joined fields are equal.  
 3: Include ALL records from 'StudentGPA' and only those records from 'ClassNames' where the joined fields are equal.

Buttons: OK, Cancel, New



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Class Notes:

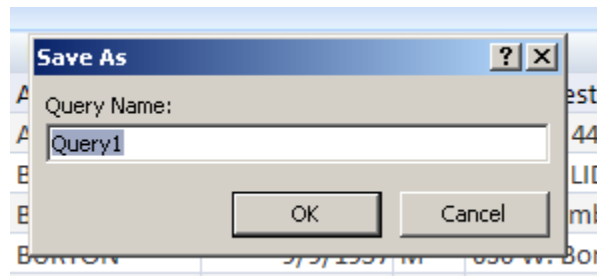
Edit the Query

To Run the Query

The image shows a screenshot of the Microsoft Access ribbon. The 'Run' button, which has a red exclamation mark icon, is circled in black. Below it, the 'View' dropdown menu is open, and 'Design View' is selected and circled in black. To the right, another screenshot shows the 'Show Table' button with a plus sign icon, and an arrow points to it with the text 'To add an additional query option / table'.

Save the query OBJ

Right Mouse Click





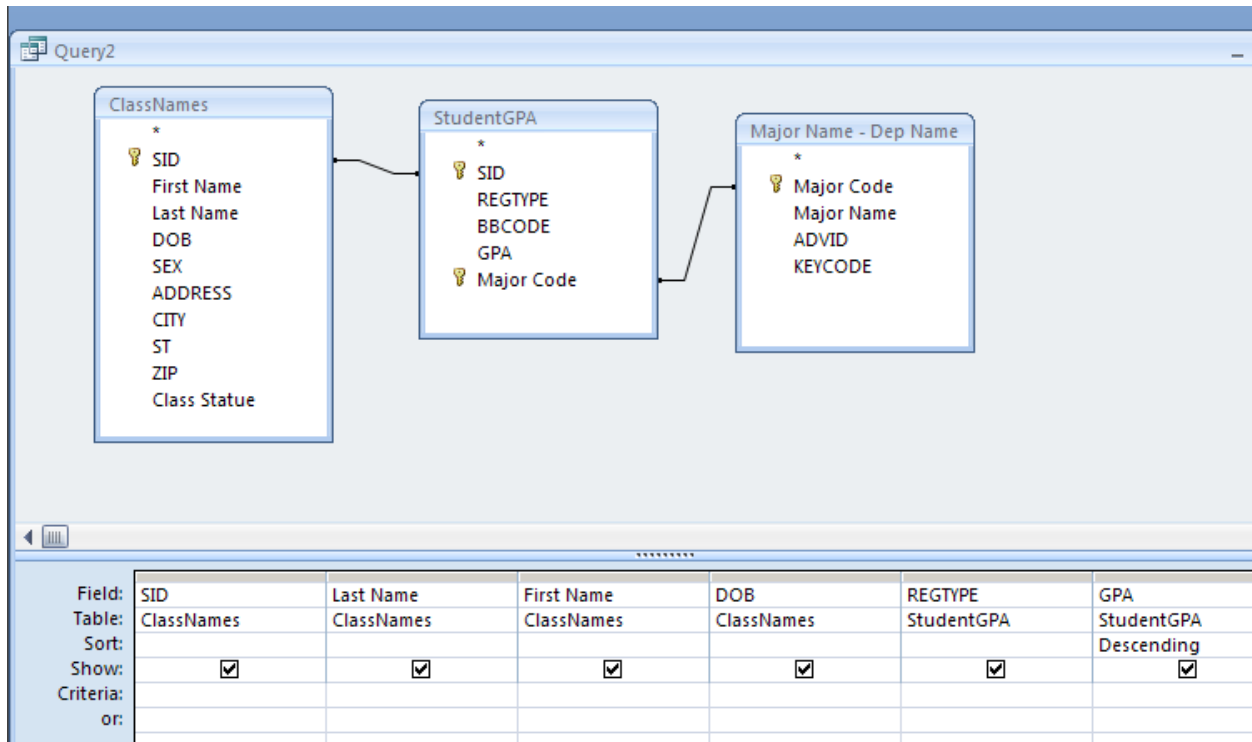
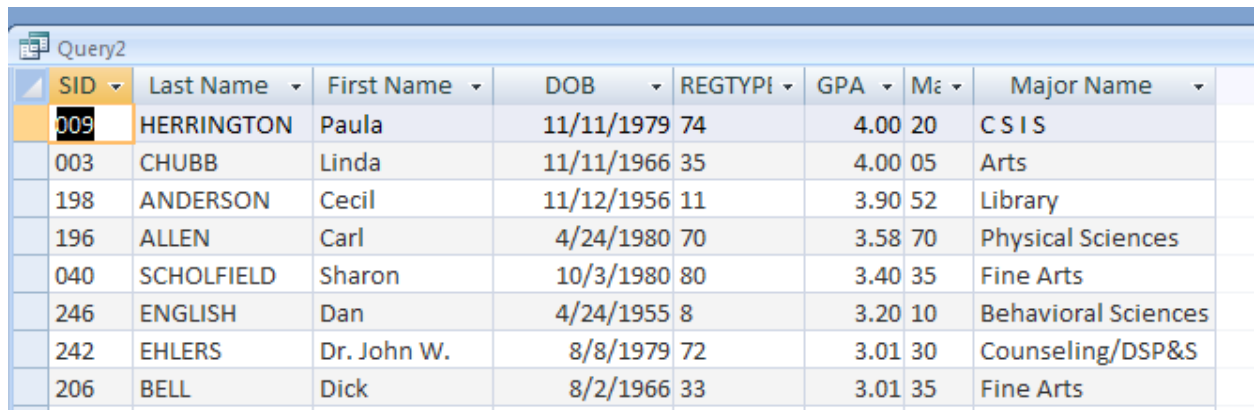
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**Class Notes:**

### A 3 table Query

SID	Last Name	First Name	DOB	REGTYPE	GPA	Major Name
009	HERRINGTON	Paula	11/11/1979	74	4.00 20	CSIS
003	CHUBB	Linda	11/11/1966	35	4.00 05	Arts
198	ANDERSON	Cecil	11/12/1956	11	3.90 52	Library
196	ALLEN	Carl	4/24/1980	70	3.58 70	Physical Sciences
040	SCHOLFIELD	Sharon	10/3/1980	80	3.40 35	Fine Arts
246	ENGLISH	Dan	4/24/1955	8	3.20 10	Behavioral Sciences
242	EHLERS	Dr. John W.	8/8/1979	72	3.01 30	Counseling/DSP&S
206	BELL	Dick	8/2/1966	33	3.01 35	Fine Arts



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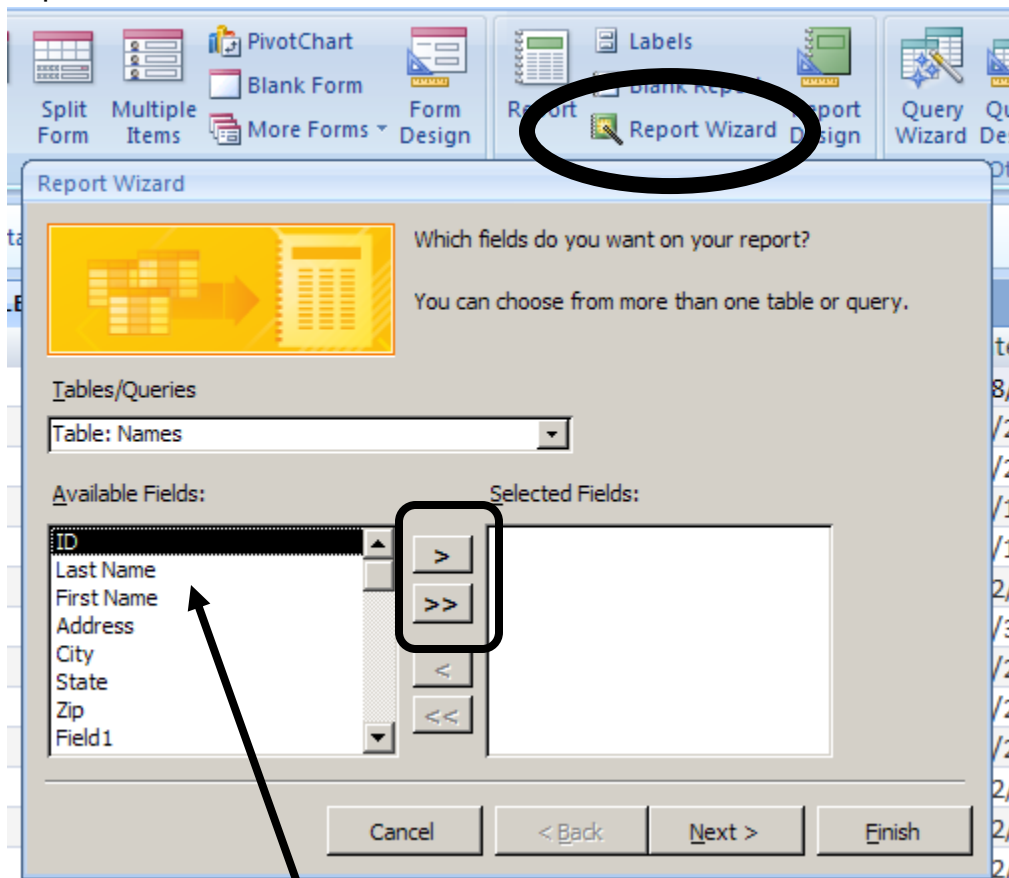
Date: December 15, 2010  
Tom Gerfen, CSIS Professor

Class Notes:

## Create Reports

Using the report Wizard

Create a Report



Select fields to print in report

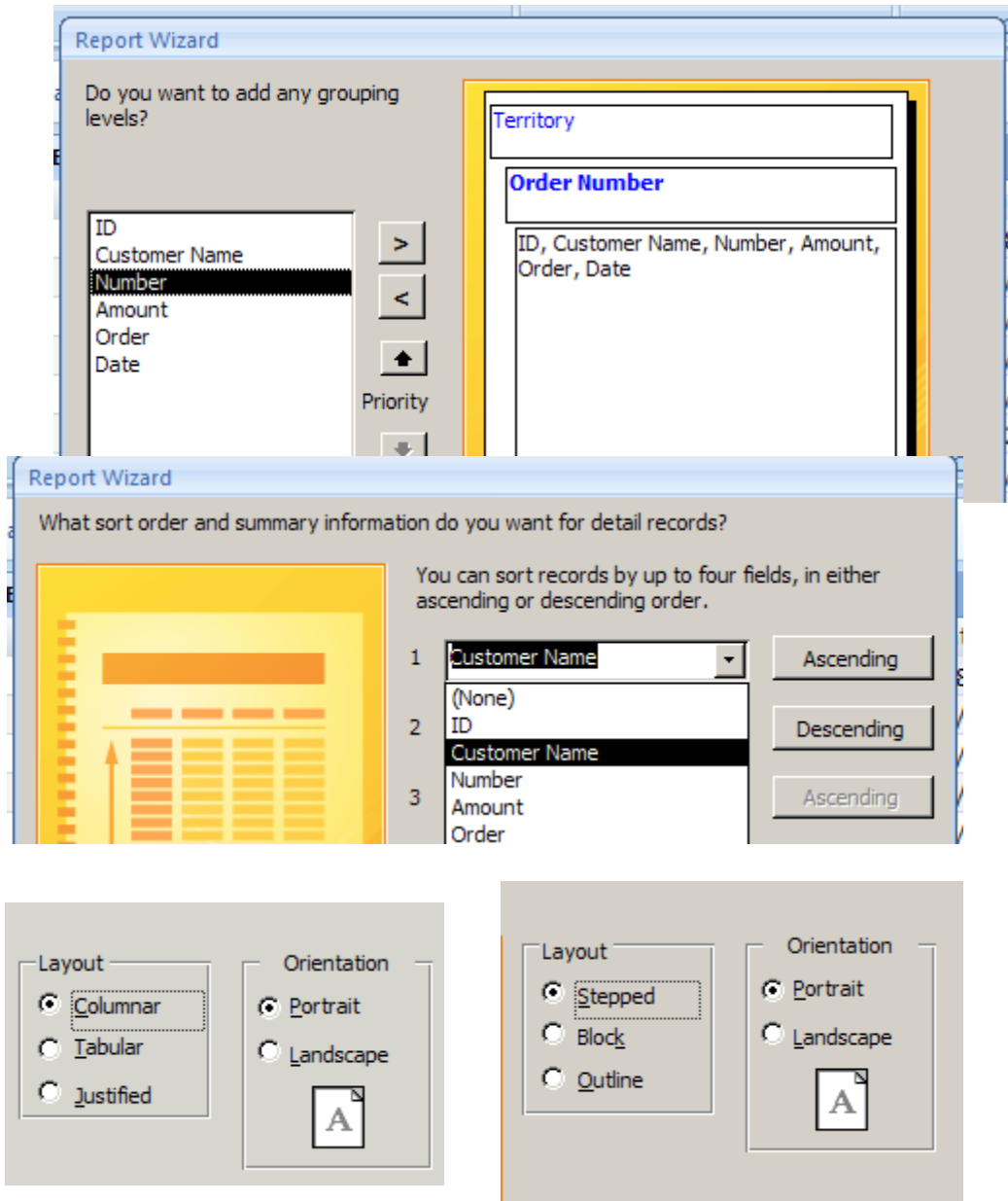


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**Class Notes:**



The image shows three overlapping dialog boxes from the Microsoft Access Report Wizard:

- Top Dialog:** "Do you want to add any grouping levels?"
  - Fields on the left: ID, Customer Name, **Number**, Amount, Order, Date.
  - Fields on the right: Territory, **Order Number**.
  - Summary information: ID, Customer Name, Number, Amount, Order, Date.
- Middle Dialog:** "What sort order and summary information do you want for detail records?"
  - Sort order 1: Customer Name (Ascending)
  - Sort order 2: ID (Descending)
  - Sort order 3: Number (Ascending)
- Bottom Dialog:** Layout and Orientation options.
  - Layout:** Columnar (selected), Tabular, Justified.
  - Orientation:** Portrait (selected), Landscape.



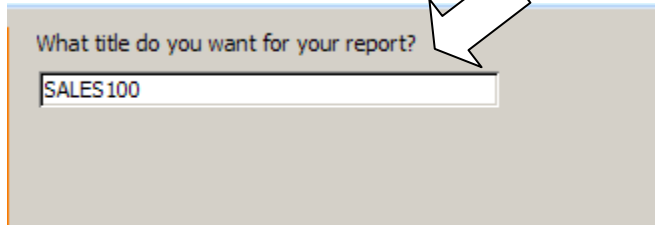
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### Class Notes:

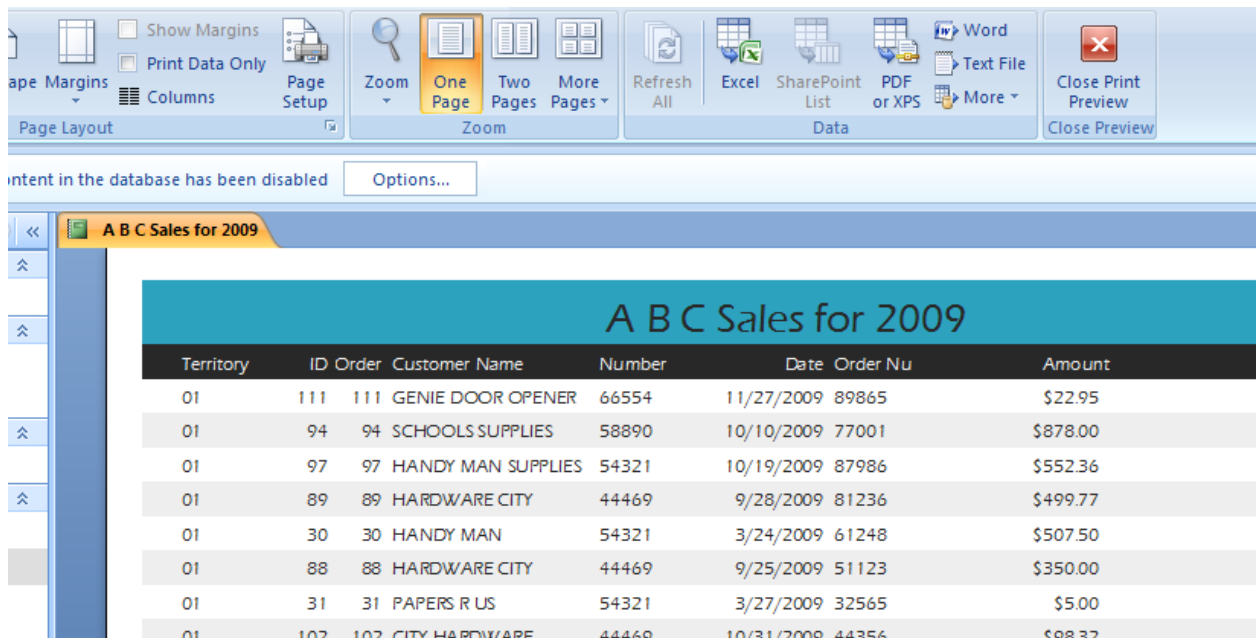
What TITLE do you want on your report ?



What title do you want for your report?

SALES100

### Sample Page Preview



Content in the database has been disabled Options...

ABC Sales for 2009

A B C Sales for 2009							
Territory	ID Order	Customer Name	Number	Date	Order Nu	Amount	
01	111	111 GENIE DOOR OPENER	66554	11/27/2009	89865	\$22.95	
01	94	94 SCHOOLS SUPPLIES	58890	10/10/2009	77001	\$878.00	
01	97	97 HANDY MAN SUPPLIES	54321	10/19/2009	87986	\$552.36	
01	89	89 HARDWARE CITY	44469	9/28/2009	81236	\$499.77	
01	30	30 HANDY MAN	54321	3/24/2009	61248	\$507.50	
01	88	88 HARDWARE CITY	44469	9/25/2009	51123	\$350.00	
01	31	31 PAPERS R US	54321	3/27/2009	32565	\$5.00	
01	102	102 CITY HARDWARE	44469	10/31/2009	44356	\$98.32	



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Class Notes:



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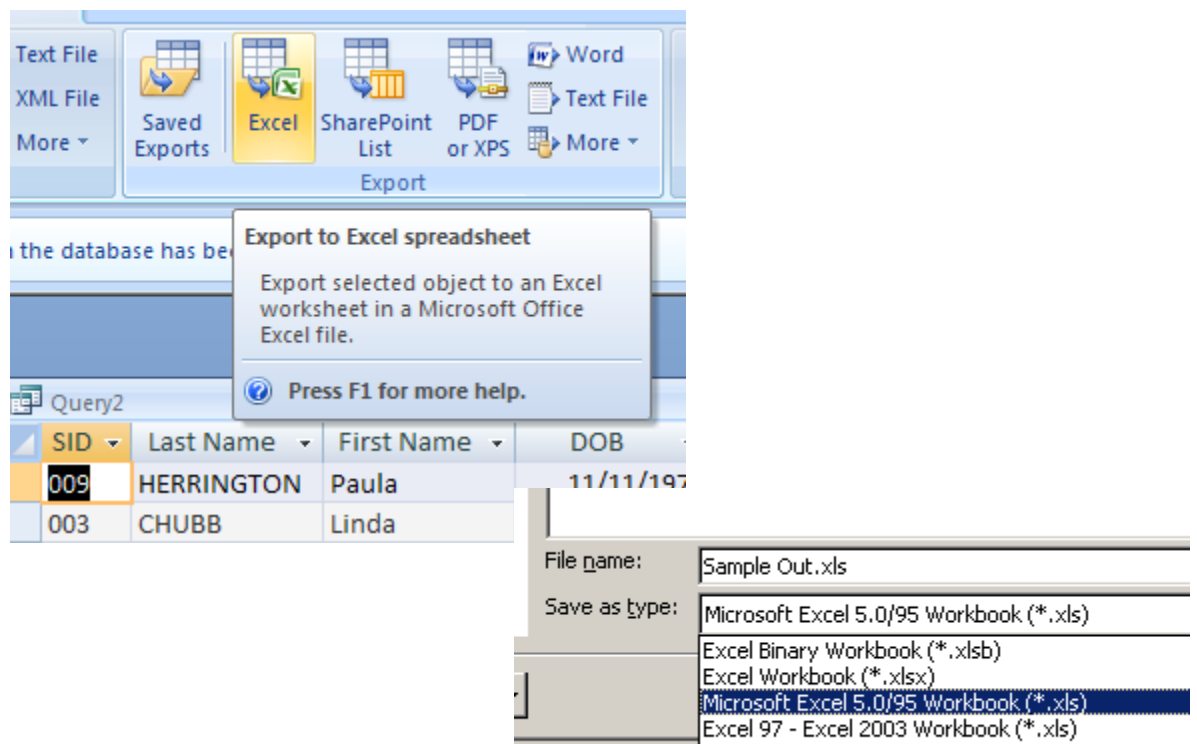
Session No # 4  
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Class Notes:

# Send the data to an EXCEL spreadsheet

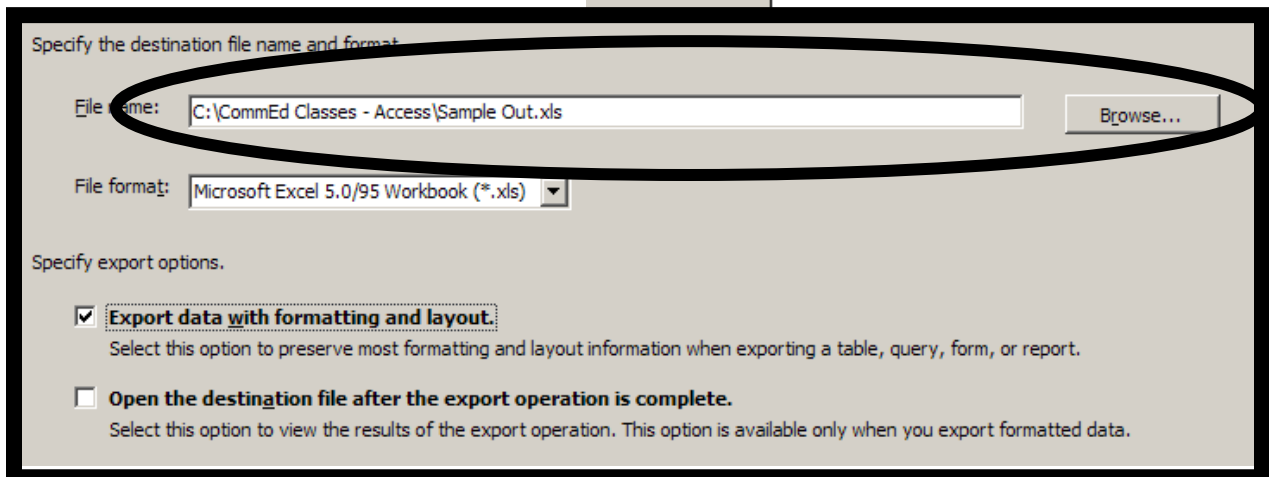
From a Query



The screenshot shows the Microsoft Access interface. The 'Export' ribbon is active, with the 'Excel' button highlighted. A context menu is open over the 'Excel' button, showing the option 'Export to Excel spreadsheet'. Below the menu, a table of data is visible:

SID	Last Name	First Name	DOB
009	HERRINGTON	Paula	11/11/1957
003	CHUBB	Linda	

Below the table, a 'Save As' dialog box is open, showing the file name 'Sample Out.xls' and the file format 'Microsoft Excel 5.0/95 Workbook (\*.xls)'. Other file formats listed include 'Excel Binary Workbook (\*.xlsb)', 'Excel Workbook (\*.xlsx)', and 'Excel 97 - Excel 2003 Workbook (\*.xls)'.



The screenshot shows the 'Export to Excel spreadsheet' dialog box. The 'File name' field is set to 'C:\CommEd Classes - Access\Sample Out.xls'. The 'File format' is set to 'Microsoft Excel 5.0/95 Workbook (\*.xls)'. The 'Export data with formatting and layout' checkbox is checked, and the 'Open the destination file after the export operation is complete' checkbox is unchecked.



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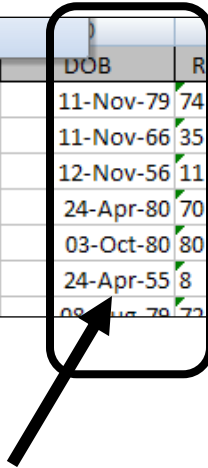
Date: December 15, 2010  
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Class Notes:

Sample Output

	A	Italicize the selected text.			D	E	F	G	H	I
1	SID	Last Name	First Name	DOB	REGTYPE	GPA	Major Co	Major Name		
2	009	HERRINGTON	Paula	11-Nov-79	74	4.00	20	CSIS		
3	003	CHUBB	Linda	11-Nov-66	35	4.00	05	Arts		
4	198	ANDERSON	Cecil	12-Nov-56	11	3.90	52	Library		
5	196	ALLEN	Carl	24-Apr-80	70	3.58	70	Physical Sciences		
6	040	SCHOLFIELD	Sharon	03-Oct-80	80	3.40	35	Fine Arts		
7	246	ENGLISH	Dan	24-Apr-55	8	3.20	10	Behavioral Sciences		
8	242	FULERS	Dr. John W.	08-Aug-79	72	2.01	20	Counseling/DSP&S		

Need to reformat in Excel the date





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Class Notes:

### Keys Commands

CTRL + = Move to the first blank record

Insert the current date CTRL+SEMICOLON (;)

Insert the current time CTRL+COLON (:)

Insert the default value for a field CTRL+ALT+SPACEBAR

**Insert the value from the same field in the previous record**

**CTRL+APOSTROPHE (')**

Add a new record CTRL+PLUS SIGN (+)

Delete the current record CTRL+MINUS SIGN (-)

Save changes to the current record SHIFT+ENTER

Toggle between the values in a check box or option button SPACEBAR

Copy the selection onto the Clipboard CTRL+C

Paste the contents of the Clipboard at the insertion point CTRL+V

Cut the selection and copy it onto the Clipboard CTRL+X

Delete the selection or the character to the left of the  
insertion point BACKSPACE

Delete the selection or the character to the right of the insertion point DEL

F5 Move to the home record

F7 Spelling dialog box

Shift + Enter Save the current record

TAB →

Shift TAB ←

HOME Record CTRL + Home Key

END Record CTRL + End Key



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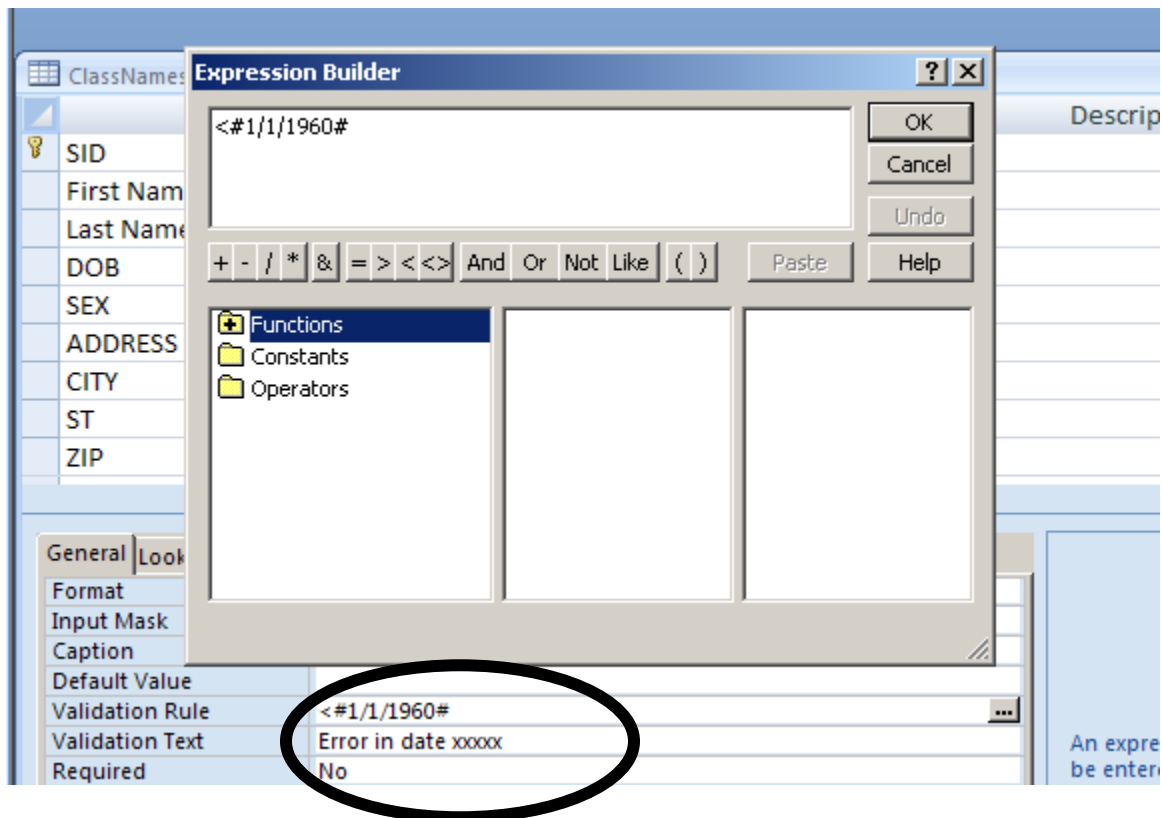
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Class Notes:

Setting a Validation Rule on a date ( less then < the year of 01-01-1960 )

Error message will show up on the input screen



#01/01/1960#

need to use # around the date



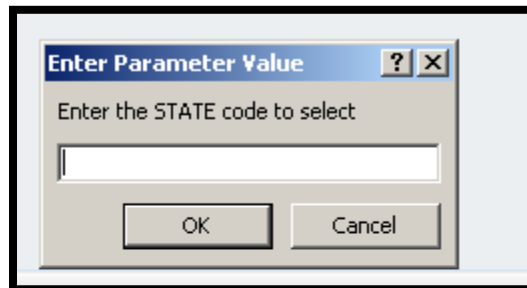
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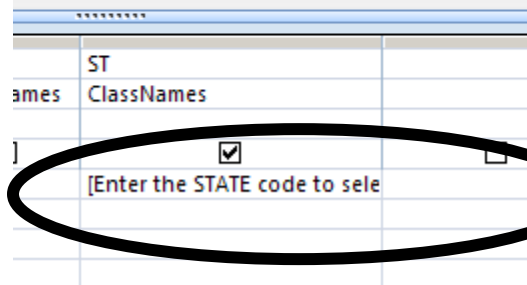
Date: December 15, 2010  
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Class Notes:

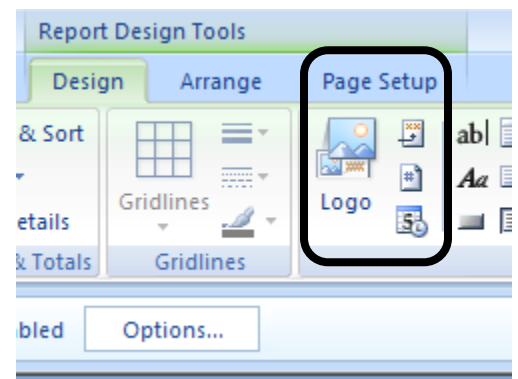
To Select a value use the [ ] to enter the Parameter Value



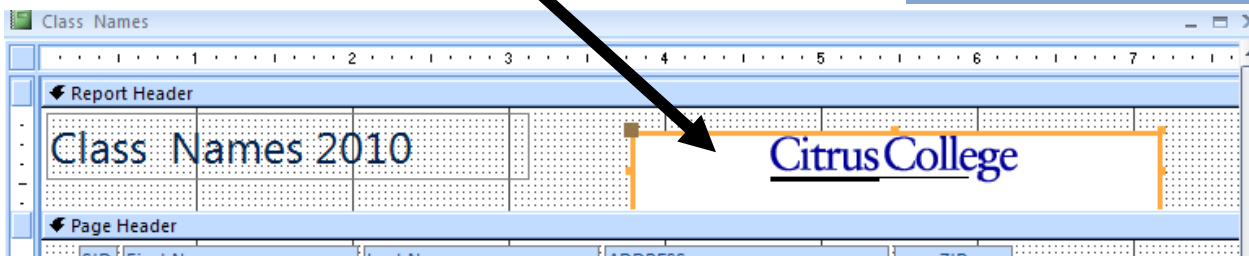
What you see on the screen



[ Enter the State code to select ]



To add a logo to a REPORT





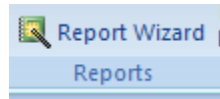
## Continuing Education-- Access

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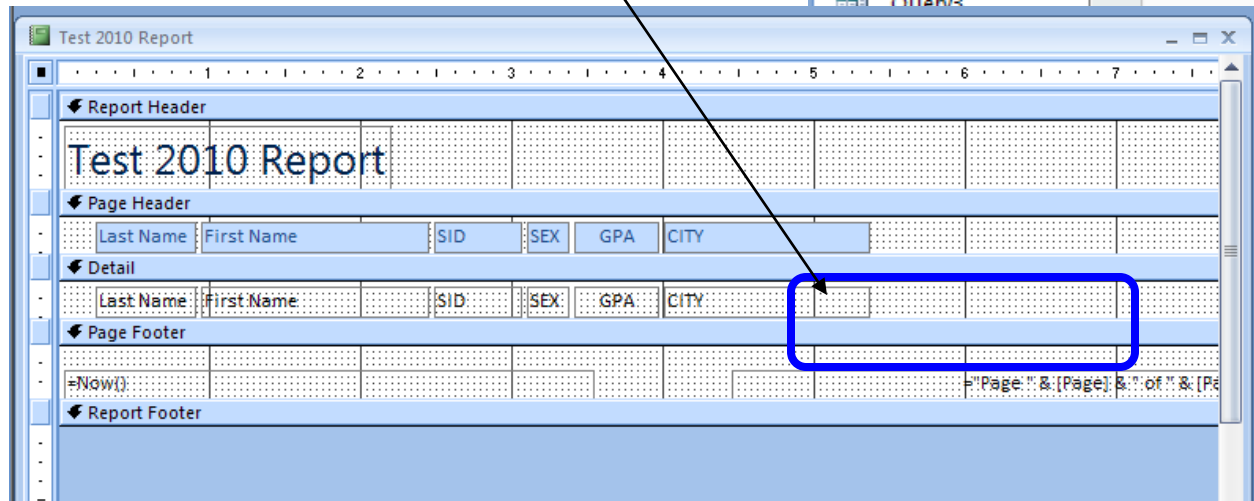
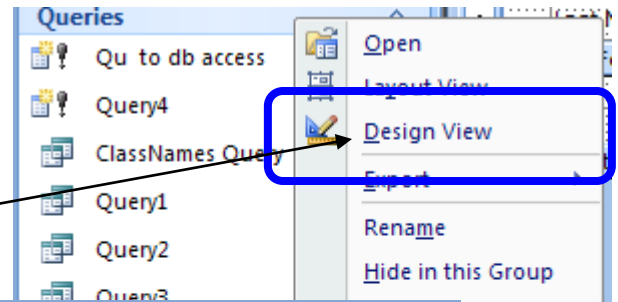
Date: December 15, 2010  
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### Class Notes:

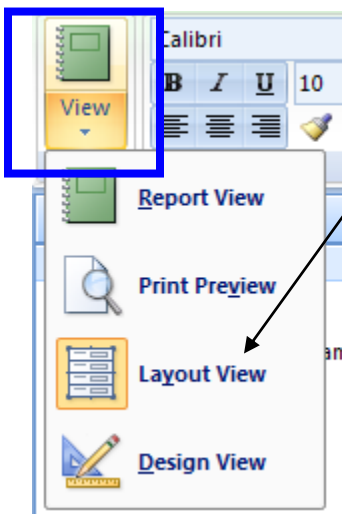
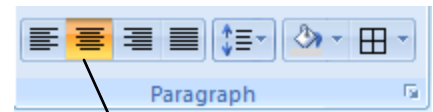
Create a Report



Modify the report Right Mouse Click on file name  
Then RMC on the Design View



Now click on View ----- then Layout View



Now you can resize the field / column  
And center the data

Test 2010 Report						
Last Name	First Name	SID	SEX	GPA	CITY	
CHUBB	Linda	003	F	4.00	Santa Ana	
HERRINGTC	Paula	009	F	4.00	Palm Desert	
KLINGLER	Treva	026	F	2.44	Monrovia	
SCHOLFIELD	Sharon	040	F	3.40	Duarte	
WEISENBAC	Betty	056	F	0.15	Oakland	
WHITE	Barbara	098	F	2.88	Grangeville	



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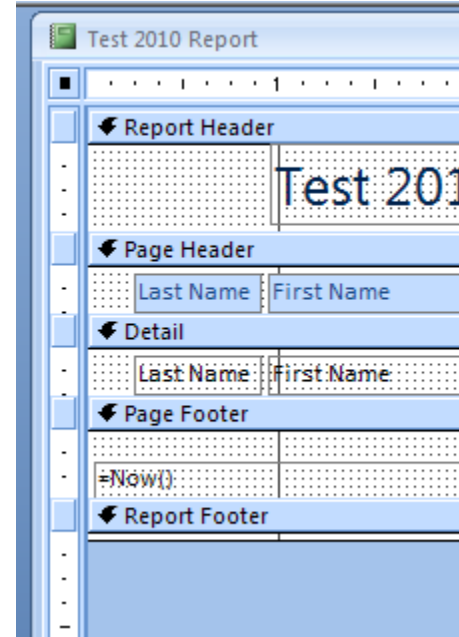
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### Class Notes:

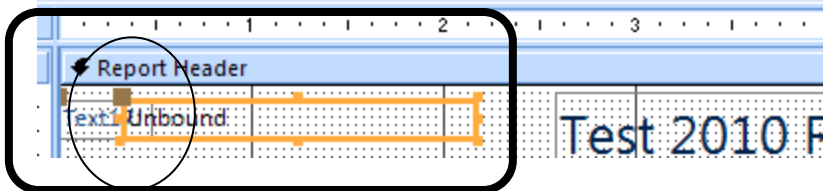
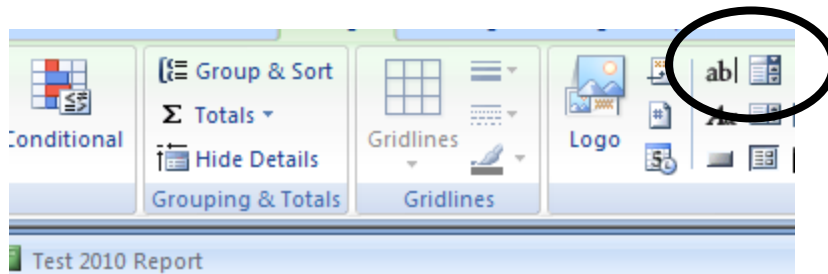
Parts / Robbins of the report

Report Header	only one time
Page Header	all pages
Detail	
Page Footer	all pages
Report Footer	End of the report

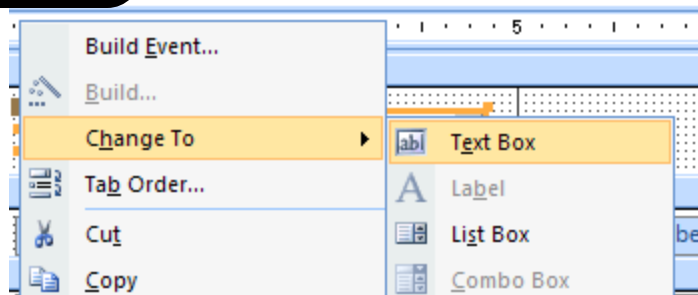


To add a TEXT BOX click on

And draw the text box then add the text



Right Mouse Click RMC





## Continuing Education-- Access

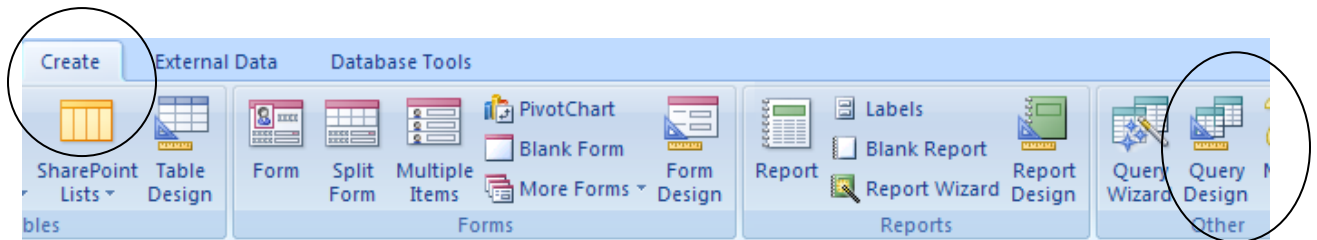
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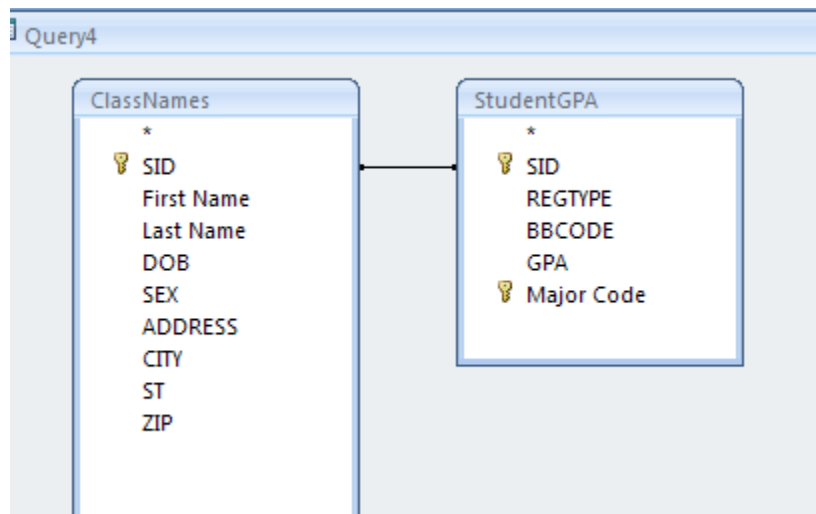
Class Notes:

### Writing Query Results to a New Table

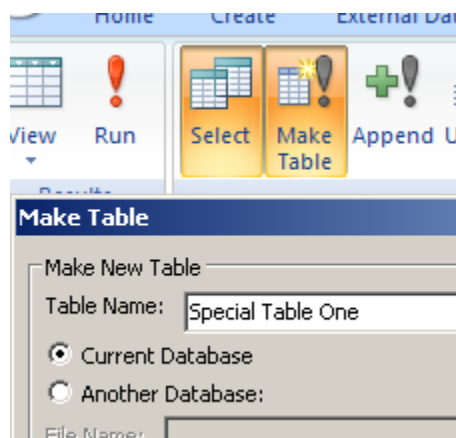
Open a Query or create one...



Build your query



Click on Make Table  
Then  
Name the NEW Table





## Continuing Education-- Access

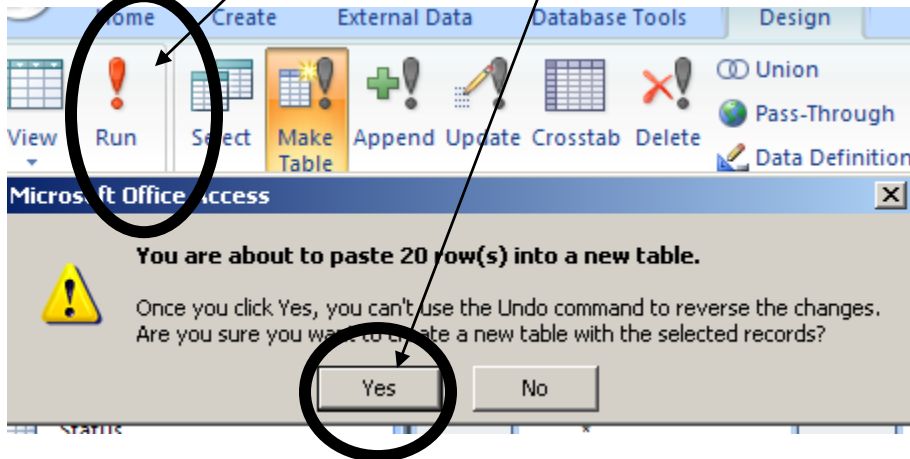
Session No # 4  
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Class Notes:

Next click ! Run

then YES



The Query data has been sent to the **new table.**