

# **INFO ASSIST REPORT WRITING**

## **Exercise Manual**

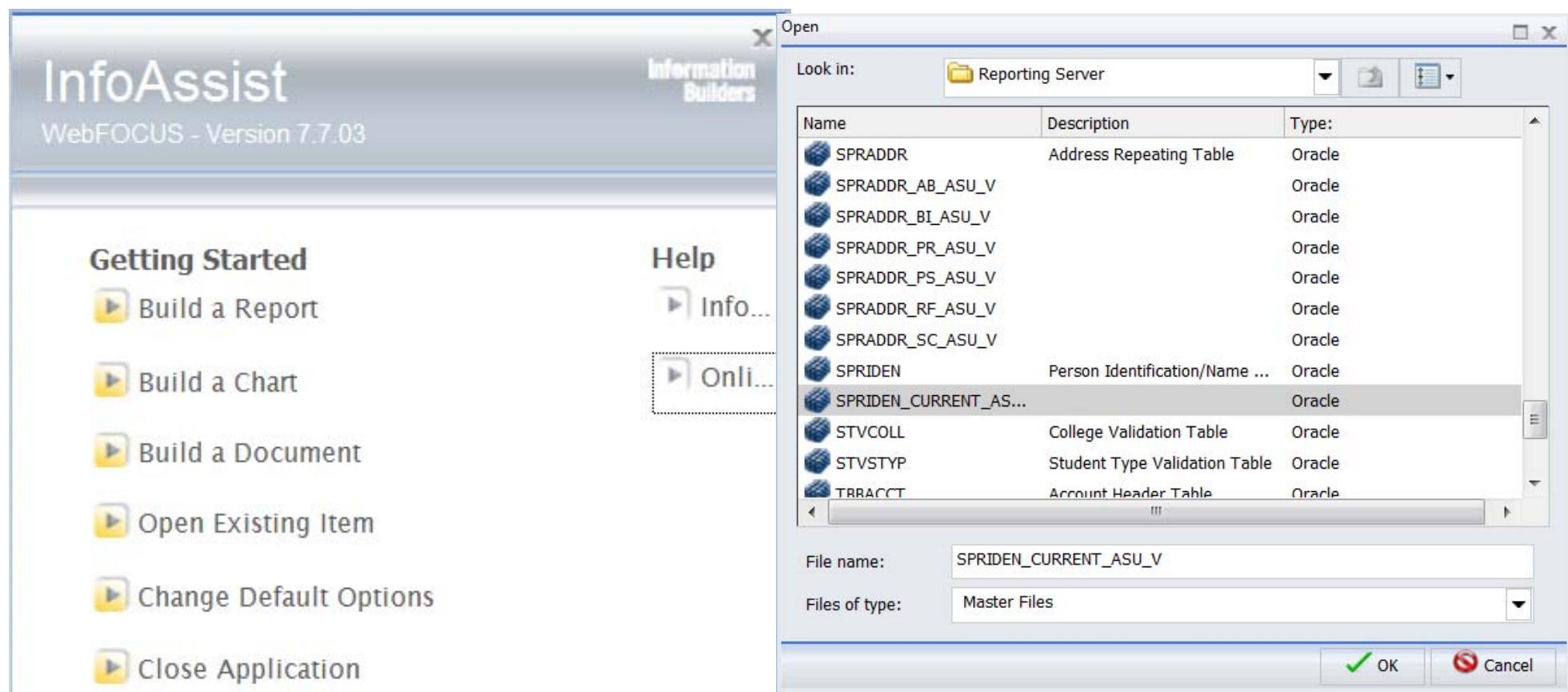
## Exercise 3.1

### Create a simple report using InfoAssist

Open InfoAssist by right clicking on your folder in the INFO ASSIST Class folder and selecting InfoAssist.

Select Build a Report from the Splash Screen.

In the Open dialog select SPRIDEN\_CURRENT\_ASU\_V and click OK.



Double click spriden\_id in the data window, notice that it is displayed in the interactive design view window. Continue selecting the following fields—spriden\_last\_name, spriden\_first\_name, spriden\_mi, and spriden\_change\_ind.

Your report should look similar to the picture below.

The screenshot shows the QlikView software interface with the 'Interactive' tab selected in the ribbon. The 'Interactive Design View' window is open, displaying a table with five columns: SPRIDEN\_ID, SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, and SPRIDEN\_CHANGE\_IND. The table contains 50 records of data. On the left side of the interface, there is a 'Data' pane showing a tree structure of dimensions and facts, and a 'Query' pane showing the current selection of fields: SPRIDEN\_ID, SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, and SPRIDEN\_CHANGE\_IND. The 'SPRIDEN\_CHANGE\_IND' field is currently selected. There is also a 'Filter' pane at the bottom left.

SPRIDEN_ID	SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SPRIDEN_CHANGE_IND
900000026	Wilcox	Kevin	Michael	.
900000027	Kershner	Amanda	Nicole	.
900000028	Lampley	Audra	Bevan	.
900000029	Kirkpatrick	Rickey	C.	.
900000030	Taylor	Rabon	H.	.
900000031	Stewart	Glenda	S.	.
900000032	Turner	Elizabeth	Ausley	.
900000033	Pridgen	Amy	Michelle	.
900000034	Carzoli	Annemarie	Page	.
900001001	Kwaji	Dauda	J.	.
900001002	Chen	Gao	.	.
900001004	Ingersoll	Richard	Craig	.
900001005	Moll	Krista	Beth	.
900001006	Nunn	Tasha	Noel	.
900001007	Karabinis	Nikki	Virginia	.
900001008	Orff	Brandon	Richard	.
900001009	Pinders	Dori	Lynne	.
900001010	Bickers	Kimberly	Ann	.
900001012	Fisher	Katherine	Olson	.
900001013	Rothschild	Judith Rice	.	.
900001014	Perry	Lester	B.	.
900001015	Hallstrom	Jeremiah	Frank	.
900001016	O'Connor	David	M.	.
900001017	Duke	Charles	R.	.
900001018	Chapman	Alicia	Mary	.
900001019	Murrow	Ethan	K.	.
900001020	Burns	Colleen	K.	.
900001021	Richardson	Robert	L.	.
900001022	Miller	Andrew	.	.
900001023	McCormick	TL	A.	.

Now we are going to add some selection criteria to our report.

Click and hold spriden\_change\_ind field in the data window and drag to the filter window.

In the Filter for spriden\_change\_ind windows click on the down arrow and select missing.

Anytime we use spriden for a report we want to set this filter.

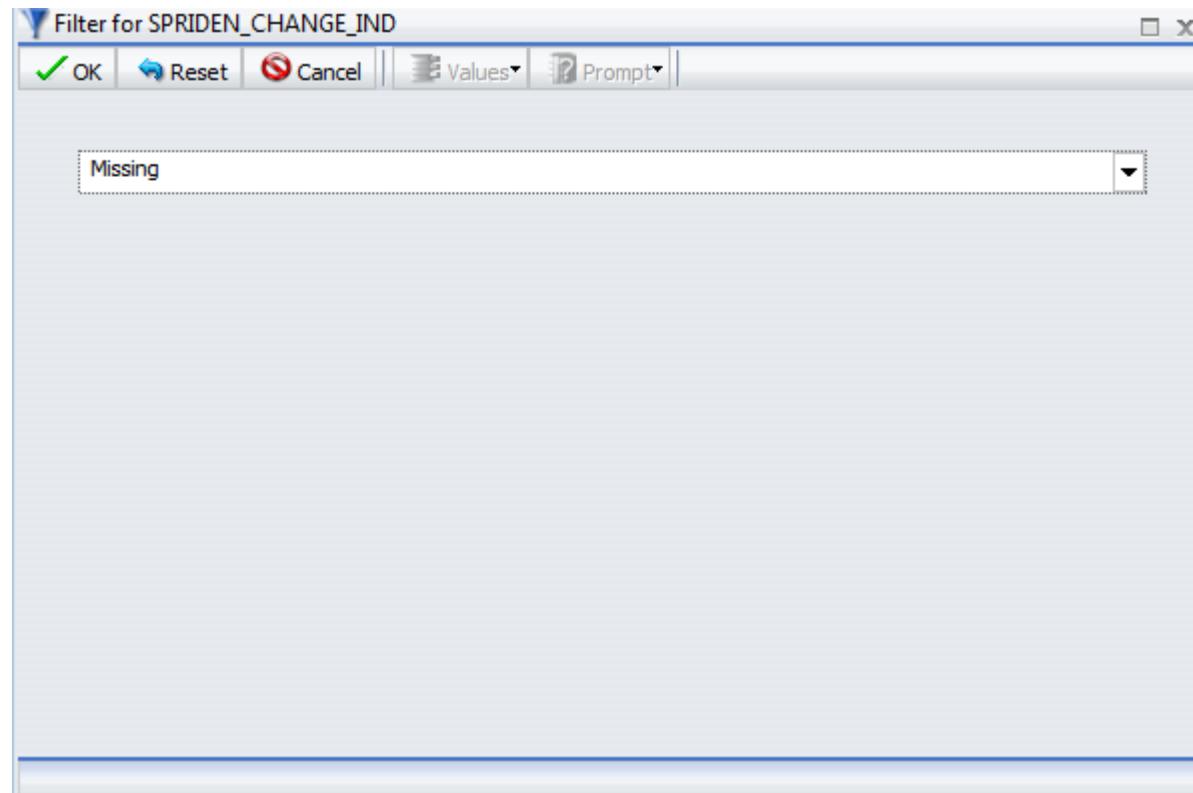
Click OK.

Notice the change in your interactive design view. Click on the SLICERS tab and Select 500 for Run time. Run your report.

Click on the IA button and select Save as

Name your report yourname31 (example linda31) and click OK

Click on the IA Button again and select exit. You should be back to your folder and see your new report under it.



## Exercise 3.2

### Sorting, adding page headings and footings and changing a column heading

In your folder under INFO ASSIST Class folder. Right click on yourname31 and select Open.

Once the report is open in InfoAssist click on the IA button and select Save As . Name the report yourname32. Click OK.

Notice the way our report is sorted. It is sorted by spriden\_id. We would really like it sorted by last name, first name, middle initial.

In the query panel select spriden\_last\_name by clicking on it and move it up to the first position under the by, select spriden\_first\_name and move it under spriden\_last\_name, select spriden\_mi and move it under spriden\_first\_name.

Notice how your report changes in the Interactive Design View window.

The screenshot shows the InfoAssist Interactive Design View window. The top menu bar includes Home, Insert, Format, Data, Slicers, Layout, View, and Field. The Field tab is selected. Below the menu is a toolbar with icons for Filter, Sort, Break, Style, and Format. The main area is divided into three sections: Data, Query, and Filter. The Data section contains a tree view of dimensions and a table with columns: SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_ID, and SPRIDEN\_CHANGE\_IND. The table rows show various names and IDs. The Query section shows a Sum operation grouped by SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_ID, and SPRIDEN\_CHANGE\_IND. The Filter section shows a condition for SPRIDEN\_CHANGE\_IND Missing.

SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SPRIDEN_ID	SPRIDEN_CHANGE_IND
Abbott	Paige	Willow	900001032	.
Arsenault	Jennifer	Lynn	900001030	.
Bickers	Kimberly	Ann	900001010	.
Bordeaux	Elizabeth	Cone	900001029	.
Burns	Colleen	K.	900001020	.
Carzoli	Annemarie	Page	900000034	.
Chapman	Alicia	Mary	900001018	.
Chauvin	Kenneth	M.	900001035	.
Chen	Gao	.	900001002	.
Clark	Karen	Rood	900001042	.
Craig	Saran	Hope	900001036	.
Cutler	Martha	Anne	900001040	.
Dabb	Brett	Alan	900001028	.
Duke	Charles	R.	900001017	.
Evans	Michael	R.	900001025	.
Fisher	Katherine	Olson	900001012	.
Gates	Paul	Henry	900001043	.
Haddad	William	H.	900001033	.
Hall	Stephen	F.	900001024	.
Hallstrom	Jeremiah	Frank	900001015	.
Huff	Jacqueline	M.	900001027	.
Ingersoll	Richard	Craig	900001004	.
Ives	Laura	B.	900001041	.
Karabinis	Nikki	Virginia	900001007	.
Kershner	Amanda	Nicole	900000027	.
Kirkpatrick	Rickey	C.	900000029	.
Kwaji	Dauda	J.	900001001	.
Lampley	Audra	Bevan	900000028	.
Livesey	Joshua	Benjamin	900001037	.
McGowan	Thomas	A.	900001023	.

We really do not want our report to look this way. We want it sorted by spriden\_last\_name but we would like to see the fields in the following order spriden\_id, spriden\_last\_name, spriden\_first\_name, Spriden\_mi

How can we accomplish this?

In your Interactive Design View window select Spriden\_last\_name and right click, scroll down to Visibility and select Hide.

Do the same with spriden\_first\_name and spriden\_mi.

The screenshot shows the SAP Crystal Reports Interactive Design View interface. On the left, there's a navigation pane with sections for Data, Filter, and Query. The Data section is expanded, showing various dimensions and their fields, including SPRIDEN\_CURRENT\_ASU\_V, Dimensions, and SPRIDEN\_CHANGE\_IND Missing. The Filter section shows a single filter for SPRIDEN\_CHANGE\_IND Missing. The Query section shows a query with Sum and By clauses, and the By clause includes SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_ID, and SPRIDEN\_CHANGE\_IND. The main area displays a table with columns: SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_ID, and SPRIDEN\_CHANGE\_IND. A context menu is open over the first row of the table, specifically over the 'SPRIDEN\_LAST\_NAME' column. The menu items include Filter Values..., Sort, Break, Visibility, Change Title..., More, and Delete. The 'Visibility' item has a submenu with 'Show' (selected) and 'Hide'. The table data starts with Abbott, Willow, 900001032, ., . and continues with other names like Arsenault, Lynn, 900001030, ., ., Bickers, Ann, 900001010, ., ., etc.

SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SPRIDEN_ID	SPRIDEN_CHANGE_IND
Abbott	Willow	900001032	.	.
Arsenault	Lynn	900001030	.	.
Bickers	Ann	900001010	.	.
Bordeaux	Cone	900001029	.	.
Burns	K.	900001020	.	.
Carzoli	Marie	900000034	.	.
Chapman	Page	900001018	.	.
Chauvin	Mary	900001035	.	.
Chen	Gao	900001002	.	.
Clark	Karen	900001042	.	.
Craig	Saran	900001036	.	.
Cutler	Martha	900001040	.	.
Dabb	Brett	900001028	.	.
Duke	Charles	900001017	.	.
Evans	R.	900001025	.	.
Fisher	Michael	900001012	.	.
Gates	Katherine	900001043	.	.
Haddad	Paul	900001033	.	.
Hall	William	900001033	.	.
Hallstrom	Stephen	900001024	.	.
Huff	Jeremiah	900001015	.	.
Ingersoll	Frank	900001027	.	.
Ives	Jacqueline	900001027	.	.
Karabinis	Richard	900001004	.	.
Kershner	Laura	900001041	.	.
Kirkpatrick	Nikki	900001007	.	.
Kwaji	Virginia	900000027	.	.
Lampley	Amanda	900000027	.	.
Livesey	Rickey	900000029	.	.
	Dauda	900000029	.	.
	J.	900001001	.	.
	Audra	900000028	.	.
	Bevan	900000028	.	.
	Joshua	900001037	.	.

Your report should look like the picture on the left below. We want to see Spriden\_last\_name, spriden\_first\_name and spriden\_mi in our report.

Click and drag spriden\_last\_name, spriden\_first\_name and spriden\_mi into the interactive design view window place them after the spriden\_id in the report. The picture on the right below is how your report should look now.

Highlight Spriden\_change\_ind in the interactive Design View window, right click and select delete. This will remove spriden\_change\_ind from your Report.

Next we will change our column heading names.

The image displays two side-by-side screenshots of the SAP Crystal Reports Interactive Design View window. Both windows have identical toolbars and navigation menus at the top.

**Left Window (Initial State):**

- Data pane:** Shows a tree view of dimensions under SPRIDEN\_CURRENT\_ASU\_V, including SPRIDEN\_ID, SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_CHANGE\_IND, SPRIDEN\_ENTITY\_IND, SPRIDEN\_ACTIVITY\_DAT, SPRIDEN\_USER, SPRIDEN\_ORIGIN, SPRIDEN\_SEARCH\_LAST, SPRIDEN\_SEARCH\_FIRS, SPRIDEN\_SEARCH\_MI, and SPRIDEN\_SOUNDDEX\_LAS.
- Filter pane:** Shows a filter for SPRIDEN\_CHANGE\_IND Missing.
- Query pane:** Shows a query with a Sum operation and a By clause for SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_ID, and SPRIDEN\_CHANGE\_IND.
- Table:** Displays a single column named SPRIDEN\_CHANGE\_IND with 24 rows of data (SPRIDEN\_ID values from 900001032 to 900001052).

**Right Window (Final State):**

- Data pane:** Shows the same tree view of dimensions under SPRIDEN\_CURRENT\_ASU\_V, but SPRIDEN\_CHANGE\_IND is no longer listed.
- Filter pane:** Shows a filter for SPRIDEN\_CHANGE\_IND Missing.
- Query pane:** Shows a query with a Sum operation and a By clause for SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_ID, and SPRIDEN\_CHANGE\_IND.
- Table:** Displays five columns: SPRIDEN\_ID, SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, and SPRIDEN\_CHANGE\_IND. The data is identical to the left window, showing 24 rows of data (SPRIDEN\_ID values from 900001032 to 900001052).

SPRIDEN_ID	SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SPRIDEN_CHANGE_IND
900001032	Abbott	Paige	Willow	.
900001030	Arsenault	Jennifer	Lynn	.
900001010	Bickers	Kimberly	Ann	.
900001029	Bordeaux	Elizabeth	Cone	.
900001020	Burns	Colleen	K.	.
900000034	Carzoli	Annemarie	Page	.
900001018	Chapman	Alicia	Mary	.
900001035	Chauvin	Kenneth	M.	.
900001002	Chen	Gao	.	.
900001042	Clark	Karen	Rood	.
900001036	Craig	Saran	Hope	.
900001040	Cutler	Martha	Anne	.
900001028	Dabb	Brett	Alan	.
900001017	Duke	Charles	R.	.
900001025	Evans	Michael	R.	.
900001012	Fisher	Katherine	Olson	.
900001043	Gates	Paul	Henry	.
900001033	Haddad	William	H.	.
900001024	Hall	Stephen	F.	.
900001015	Hallstrom	Jeremiah	Frank	.
900001027	Huff	Jacqueline	M.	.
900001004	Ingersoll	Richard	Craig	.
900001041	Ives	Laura	B.	.
900001007	Karabinis	Nikki	Virginia	.
900000027	Kershner	Amanda	Nicole	.
900000029	Kirkpatrick	Rickey	C.	.
900001001	Kwaji	Dauda	J.	.
900000028	Lamplrey	Audra	Bevan	.
900001037	Livesey	Joshua	Benjamin	.
900001023	McGowan	Thomas	A.	.

Select spriden\_id in the Interactive Design view window right click and select Change Title. Enter ID in the Enter Title box and click OK.

Continue to change the field titles in the report. Select Spriden\_Last\_name and change the title to LAST NAME. Select Spriden\_first\_name and change the title to FIRST NAME. Select Spriden\_mi and change the title to MIDDLE NAME.

Click on the Slicers tab and select 500 in the Run Time box. Run the report.

Once you finish with this click on the IA button and Select Save.

Now we are going to add a header and footer to our report.

The screenshot shows the Microsoft Analysis Services (MAS) Interactive Design View window. The ribbon tabs are Home, Insert, Format, Data, Slicers, Layout, View, and Field - SPRIDEN\_ID. The Data tab is selected, showing a table with columns: SPRIDEN\_ID, SPRIDEN, LAST\_NAME, SPRIDEN\_FIRST\_NAME, and SPRIDEN\_MI. A context menu is open over the first row of the table, specifically over the 'SPRIDEN\_ID' column. The menu items are: Filter Values..., Sort, Break, Visibility, Change Title..., More, and Delete. The 'Change Title...' option is highlighted. An 'Edit Title' dialog box is displayed in front of the table, containing a question mark icon and a text input field labeled 'Enter Title'. Below the input field are 'OK' and 'Cancel' buttons. In the bottom left corner of the main window, there is a 'Query' section with a 'Sum' and 'By' row, and a 'SPRIDEN\_LAST\_NAME', 'SPRIDEN\_FIRST\_NAME', and 'SPRIDEN\_MI' column.

SPRIDEN_ID	SPRIDEN	LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI
90	Sort		Paige	Willow
90	Break		Jennifer	Lynn
90	Visibility		Kimberly	Ann
90	Change Title...		Elizabeth	Cone
90	More		Colleen	K.
90	Delete			
900001002	Chen			
900001042	Clark			
900001036	Craig			
900001040	Cutler			
900001028	Dabb			
900001017	Duke			
900001025	Duke			
900001012	Fisher			
900001043	Gates			
900001033	Haddad	William	H.	
900001024	Hall	Stephen	F.	
900001015	Hallstrom	Jeremiah	Frank	
900001027	Huff	Jacqueline	M.	
900001004	Ingersoll	Richard	Craig	
900001041	Ives	Laura	B.	
900001007	Karabinis	Nikki	Virginia	
90000027	Kershner	Amanda	Nicole	
90000029	Kirkpatrick	Rickey	C.	

Make sure the HOME tab is the active tab in InfoAssist. Click the Header & Footer button, If you do not see the Header & Footer button, Click the Report button then click Header & Footer Button. Select Page Header and type SIMPLE PERSON LIST in the window. Notice you can format the heading right in this same window. Play with it. Once you like your heading click OK.

If you end up with a report heading and a page heading select the report heading and right click and select delete. It will remove the report heading and leave your page heading.

Now we will add a Page Footing

The screenshot shows the InfoAssist software interface with the following details:

- Toolbar:** Home, Insert, Format, Data, Slicers, Layout, View, Field - SPRIDEN\_ID, Chart, Report, Interactive, Document, Data from Source, Use Sample Data, Records: 50, Filter, Theme, Style, Banded, Header & Footer, Column Totals, Row Totals.
- Design View:** Interactive Design View showing an 'Interactive' report.
- Data Panel:** Data source: SPRIDEN\_CURRENT\_ASU\_V, Dimensions: SPRIDEN\_ID, SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SPRIDEN\_CHANGE\_IND, SPRIDEN\_ENTITY\_IND, SPRIDEN\_ACTIVITY\_DAT, SPRIDEN\_USER, SPRIDEN\_ORIGIN, SPRIDEN\_SEARCH\_LAST, SPRIDEN\_SEARCH\_FIRST, SPRIDEN\_SEARCH\_MI, SPRIDEN\_SOUNDDEX\_LAST.
- Filter Panel:** Filter: SPRIDEN\_CHANGE\_IND Missing.
- Query Panel:** Sum, By: SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN MI.
- Table:** A table with columns ID, LAST NAME, FIRST NAME, MIDDLE NAME, showing data rows such as 900001032, Abbott, Paige, Willow; 900001030, 900001010, 900001029, 900001020, 90000034, 900001018, 900001035, 900001002, 900001042, 900001036, 900001040, 900001028, 900001017, 900001025, 900001012, 900001043, 900001033, 900001024, 900001015, 900001027, 900001004, 900001041, 900001007, Karabinis, Nikki, Virginia; 90000027, Kershner, Amanda, Nicole; 90000029, Kirkpatrick, Rickey, C.
- Header & Footer Editor:** A floating window titled 'Header & Footer' containing the text 'SIMPLE PERSON LIST' in bold black font. It includes a toolbar for font, size, bold, italic, underline, etc.
- Buttons:** OK, Reset, Cancel, Apply.

Click the small down arrow next to the Header & Footer button on the home tool bar and select Page Footer. Type in Prepared on:

Click the preformatted text button and Select Date then the date with the day name, month, day, and year.

Click Apply then Okay. Scroll to the bottom of your Interactive Design View window and check your page footing. Run your report.

Click on the IA button and select save. Click on the IA button again and select exit. You should return to your folder under the INFO ASSIST Class folder.

The screenshot shows the SAP InfoAssist Interactive Design View interface. The top menu bar includes Home, Insert, Format, Data, Slicers, Layout, View, and Field - SPRIDEN\_ID. The ribbon tabs are Format, Design, Filter, and Report. The Report tab is active, showing a dropdown menu with options like Header & Footer, Report Header, Page Header, Page Footer, and Report Footer. The 'Page Footer' tab is selected. A context menu is open at the bottom of this dropdown, with 'Date' highlighted. A submenu for 'Date' shows the selected value as 'August 27, 2013'. The main area displays a table titled 'SIMPLE PERSON LIST' with columns ID, LAST NAME, FIRST NAME, and MIDDLE NAME. The table contains several rows of data. On the left, there's a tree view of dimensions and a filter section for 'SPRIDEN\_CHANGE\_IND Missing'. At the bottom, there's a query editor with 'Sum By' selected and fields SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, and SPRIDEN\_MI.

### Exercise 3.3

#### Using Sort, Sum and Across to create a Matrix Report

Create a new report using SHRTRCE. Right click on your folder and select InfoAssist. At the InfoAssist Splash Screen select Build a Report. Select SHRTRCE from the Open dialog window and click OK.

Add the following fields to the report—shrtrce\_term\_code\_eff and shrtrce\_credit\_hours. Notice the report is sorted by shrtrce\_term\_code\_eff and shrtrce\_credit\_hours are summed.

Now add shrtrce\_pidm to the report. Place it at the beginning of the report in front of shrtrce\_term\_code\_eff.

Go to the query pane and drag shrtrce\_term\_code\_eff under across. You have just created your first matrix report. Click on the Slicers Tab and Select 500 in the Run time box. Run the Report.

Click on the IA button and select Save. Name your report yourname33 click ok. Click on the IA button again and select Exit.

The screenshot shows the Interactive Design View (IDV) interface. On the left, there is a Data pane containing a list of fields: SHRTRCE\_CRSE\_TITLE, SHRTRCE\_GRDE\_CODE, SHRTRCE\_GMOD\_CODE, SHRTRCE\_COUNT\_IN\_GPA, SHRTRCE\_ACTIVITY\_DATE, SHRTRCE\_REPEAT\_COURS, SHRTRCE\_REPEAT\_SYS, Measures/Properties (with items SHRTRCE\_PIDM, SHRTRCE\_TRIT\_SEQ\_NO, and SHRTREE\_TERM\_CODE\_NO), and a Filter pane below it. Below the Data pane is a Query pane with three sections: Sum (SHRTRCE\_CREDIT\_HOURS), By (SHRTRCE\_PIDM), and Across (SHRTRCE\_TERM\_CODE\_EFFECT). The main area is titled "Interactive Design View" and displays a matrix report. The columns are labeled "SHRTRCE TERM CODE EFF" with values 198240, 198340, 198520, 198530, and 198640. The rows are labeled "SHRTRCE\_PIDM" with values 221487, 221512, 221518, and 221524. The data cells show summarized values: 221487 has 15.000 and 3.300; 221512 has 86.000; 221518 has 3.000; and 221524 has 43.000.

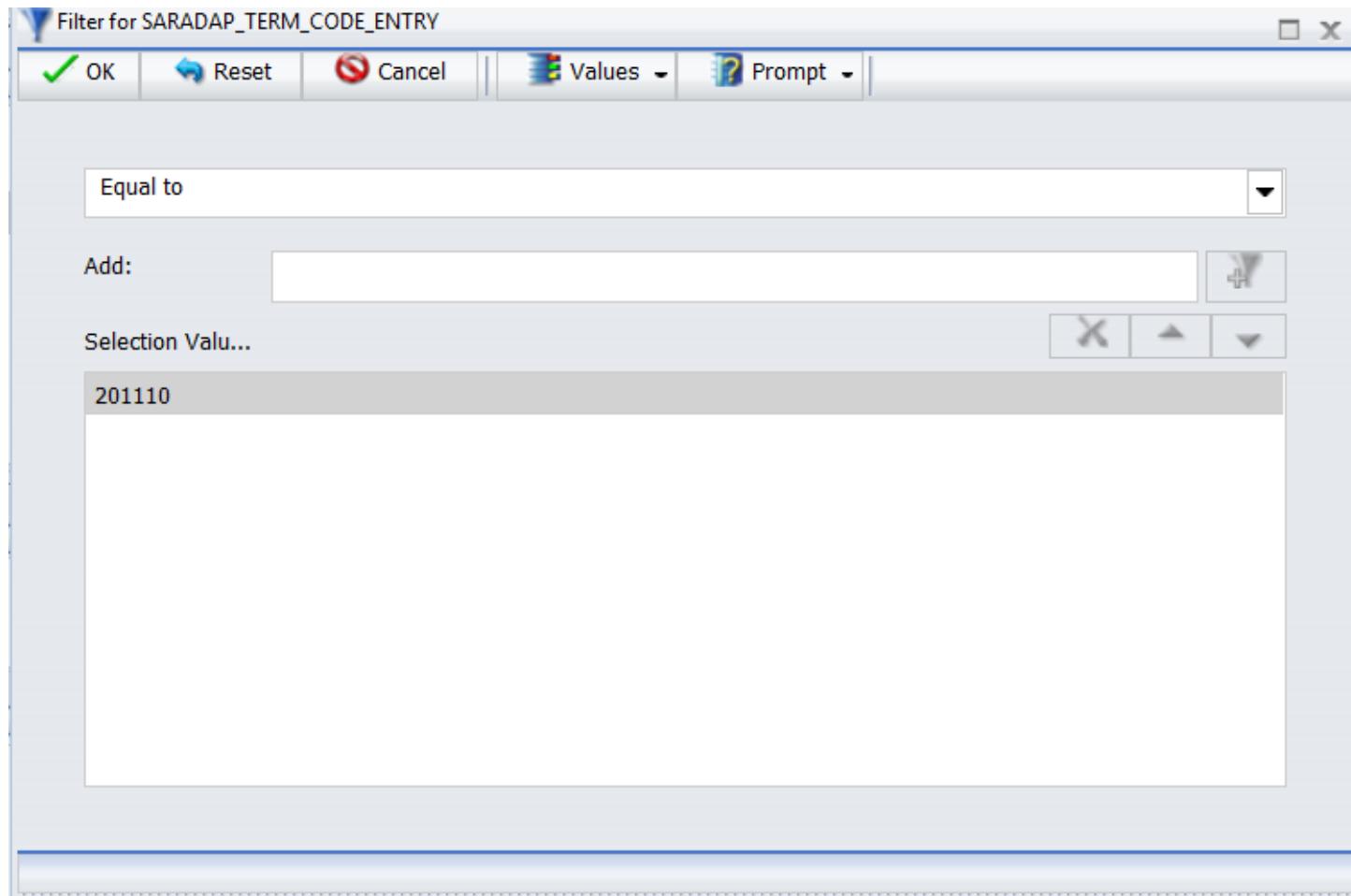
## Exercise 4.1

### Create Filters in a Report

Create a new report using SARADAP. Add saradap\_pidm, saradap\_term\_code\_entry, saradap\_styp\_code, saradap\_admt\_code to the report.

Grab saradap\_term\_code\_entry and drag to the filter area. The Filter for saradap\_term\_code\_entry dialog window opens. In the Add dialog box type 201110 then click the add button. Notice the selection values windows is now populated with 201110. Click OK.

Notice your Interactive Design View window changes to just the saradap\_term\_code\_entry of 201110.

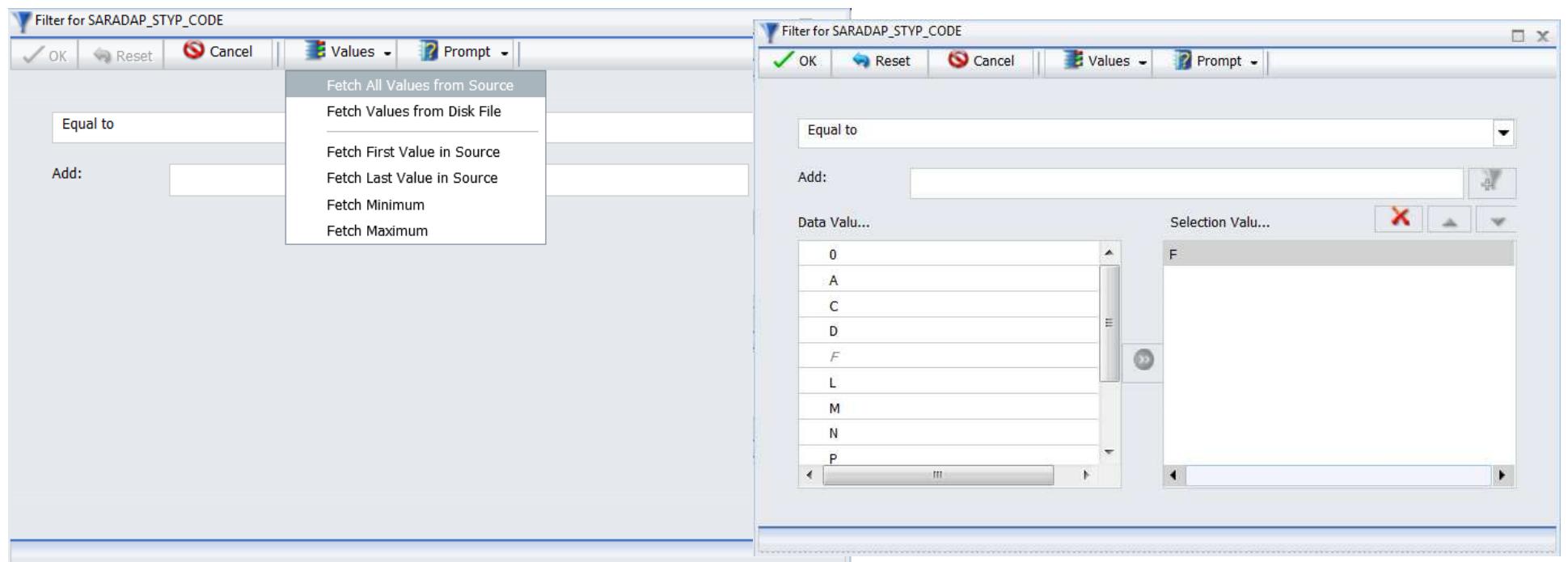


Add the selection student type equals Freshman.

Grab and drag saradap\_styp\_code to the filter area. The Filter for saradap\_styp\_code dialog window opens. We are not sure how the data is stored in this field so we are going to click on the Values button and select Fetch All Values from the Source. This will provide us with a list of Values in the source data. We want to pick F. Double Click F in the Data Values section so it appears in the Selection Values section then click OK.

Once again notice the change in the Interactive Design View window. Click the Slicers tab and select 500 in the Runt time box. Run your Report.

Click the IA icon and select save. Name the report yourname41 click OK. Click the IA icon again and select Exit. You should be back at your folder.



## Exercise 4.2

### Using Masking in Filters

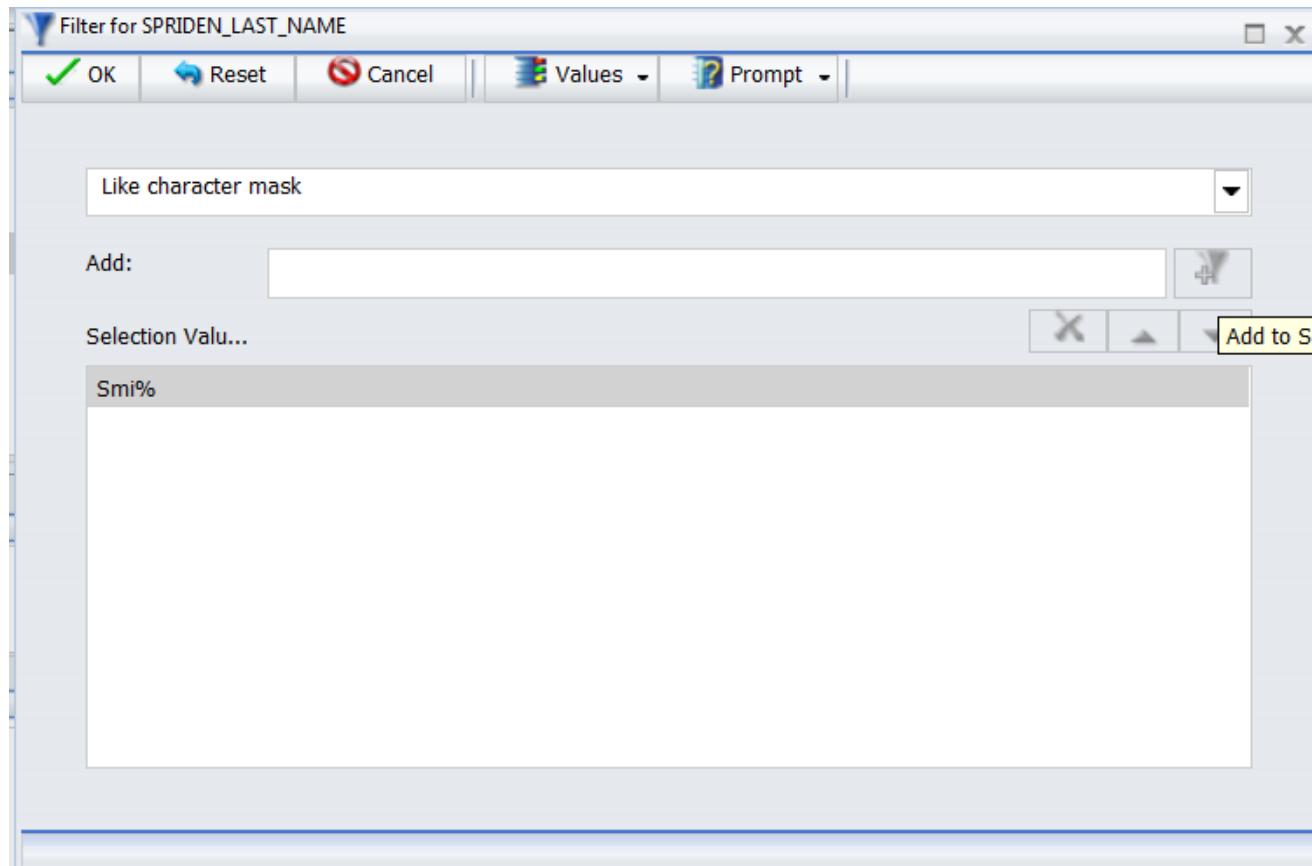
Create a new report using spriden\_current\_asu\_v. Add spriden\_last\_name, spriden\_first\_name, and spriden\_mi to the report.

Click and Drag spriden\_last\_name to the filters area. In the Filter for spriden\_last\_name dialog window. Select Like character mask . Type in Smi% in the Add dialog and click the Add button to add it to the Selection Values area. Click OK.

Notice again that the Interactive design view changes to match your filter. Click the Slicers tab and select 500 in the Run Time box.

Run the Report.

Click on the IA button and select Save. Name your report yourname42 and click OK. Click the IA button again and select exit. You should be back at your folder.



## Exercise 4.3

### Compound Filters

Highlight and right click on yourname41 report in your folder and select copy. Right click on your folder and select paste. Right click on yourname41 (copy 1) and select properties. Change the name to yourname43 and click OK. Right click on yourname43 and select open.

Add saradap\_levl\_code after saradap\_term\_code\_entry in your report. Click on saradap\_styp\_code in the Interactive Design View window and right click and select delete.

Select saradap\_styp\_code in the Filter area, right click and select delete.

The only filter you should have now is the saradap\_term\_code\_entry equal to 201110.

SARADAP_PIDM	SARADAP_TERM_CODE_ENTRY	SARADAP_LEVL_CODE	SARADAP_ADMT_CODE
521329	201110	U	ST
521330	201110	U	ST
521344	201110	U	ST
521345	201110	U	ST
521351	201110	U	ST
521352	201110	U	ST
521362	201110	U	ST
521365	201110	U	ST
521370	201110	U	ST
521371	201110	U	ST
521375	201110	U	ST
521380	201110	U	ST
521388	201110	U	ST
521404	201110	U	ST
521419	201110	U	ST
521433	201110	U	ST
521451	201110	U	ST

Grab and drag saradap\_levl\_code to the Filter area. Click Values, Fetch all Values from Source. Click G and G2 to add these values to the Selection Values. Click OK.

Highlight saradap\_levl\_code in the filters window. Right click , Select Open, then select Advanced Filter. Click the Insert After button, in the field list select saradap\_admt\_code leave the equal to Click on <Value>, Leave the type as Constant, Click the Get Values button, click All, then select EX from the list and add it to the Multiple Values window. Click OK.

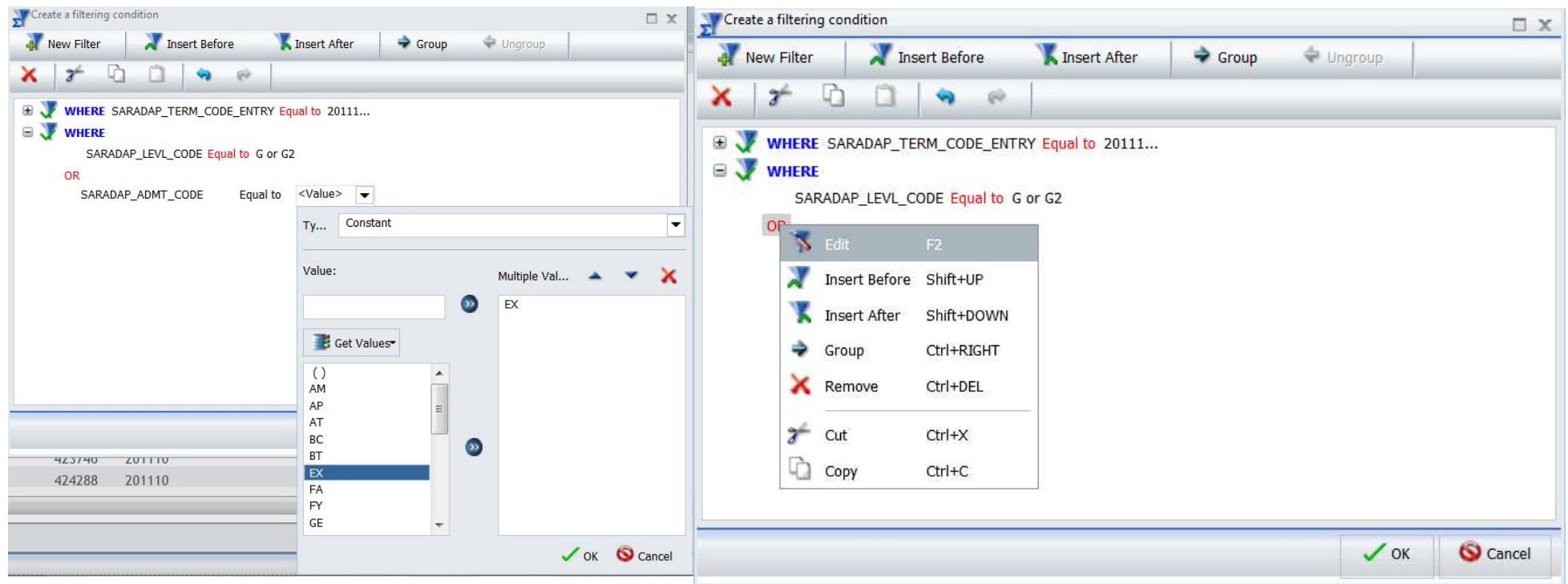
Right Click on the OR between the 2 statements and Select Edit. Change the OR to AND. When completed Click OK.

Again Notice the Interactive Design View window changes to match your selections.

Run the Report.

Click the IA button and select Exit. You will be prompted to save changes. Select yes.

You should be back at your folder.



## Exercise 4.4

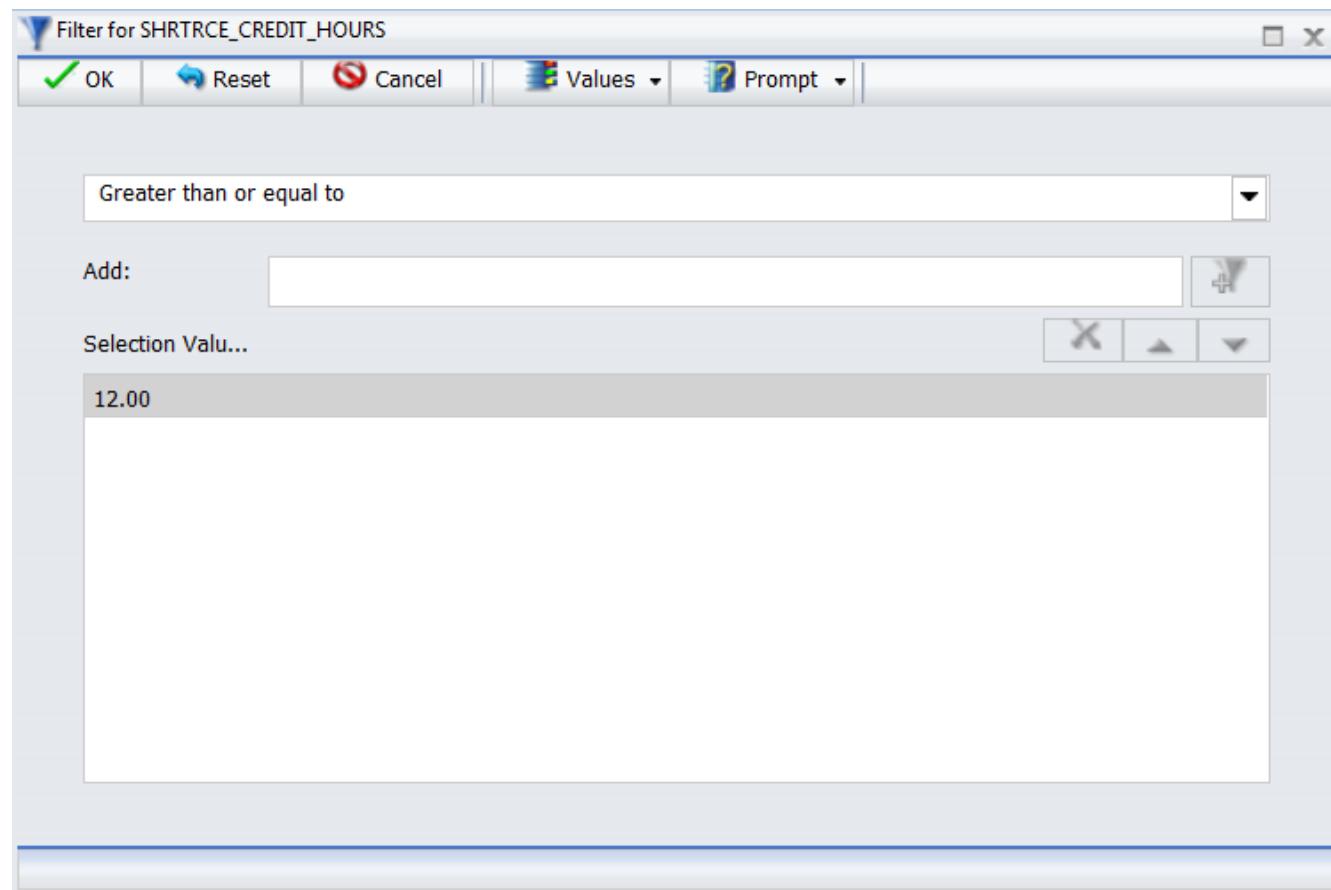
### Numeric Filters

Highlight your report named yourreport33 and right click and select copy. Select your folder and right click and select paste.

Right click on yourname33 (copy 1) and select properties. Change the name of the report to yourname44.

Right click on yourname44 and select Open. The report will open in InfoAssist.

Drag and drop shrtrce\_credit\_hours to the Filter area. Select Greater than or equal to from the drop down list. Type in 12.00 in the Add box, then click the add button. Click OK.



Notice the change in the interactive Design View.

Right click on shrtrce\_credit\_hours greater than or equal to 12.00 in the filter section and select Open then select Advanced Filter.

The create a filtering condition dialog open. Highlight the statement Shrtrce\_credit\_hours Greater than or equal to 12.00. Click Insert After button. You are prompted to pick a field, select shrtrce\_credit\_hours, Click Equal to and scroll down and select Less Than or equal to.

Next click <Value> , leave Constant as the type. Enter 60.00 in the Value box. And click OK.

Last but not least right click on the OR between the statements and select Edit, then Select AND. Click OK.

Run the Report. Click the IA button and Select Exit. You will be prompted to save your changes. Select Yes.

The screenshot shows the Oracle BI Interactive Design View interface. On the left, there's a 'Filter' section with a green checkmark next to 'SHRTRCE\_CREDIT\_HOURS Greater than or equal to 12.00'. A context menu is open over this filter, with 'Advanced Filter' selected. To the right, a 'Create a filtering condition' dialog is open, showing a 'WHERE' clause with two conditions separated by an 'OR': 'SHRTRCE\_CREDIT\_HOURS Greater than or equal to 12.00' and 'SHRTRCE\_CREDIT\_HOURS Less than or equal to <Value>'. The '<Value>' dropdown is set to 'Constant' and contains '60.00'. Below this, there's a 'Value:' input field and a 'Get Values...' button. On the far left, under 'WHERE', there's an 'OR' section with 'SHRTRCE\_CREDIT\_HOURS Greater than or equal to 12.00'. A dropdown menu for this condition is open, showing options like 'Equal to', 'Less than or equal to', etc., with 'Less than or equal to' currently selected. The background shows a small portion of a report grid with some numerical data.

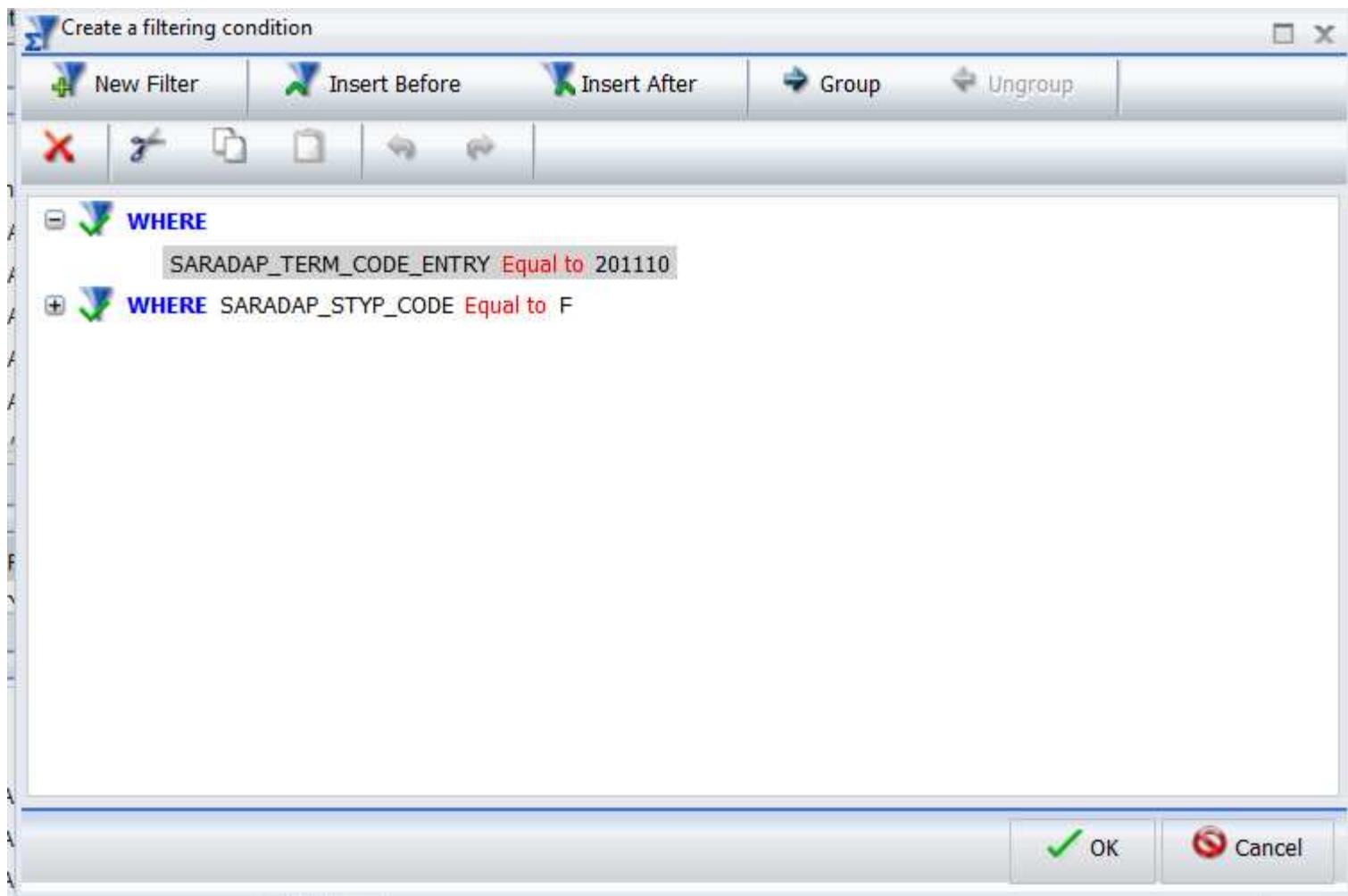
## Exercise 5.1

### Creating Prompts

Right click on yourname41 and select copy. Right click on your folder and select paste. Right click on yourname41 (Copy 1) and select properties. Enter yourname51 in the Name dialog box and Click OK.

Right click on yourname51 and select Open. The report will open in InfoAssist. In the Filter window, right click on saradap\_term\_code\_entry equals 201110 and select Open, then select Advanced Filter.

You should see a window like the one below.

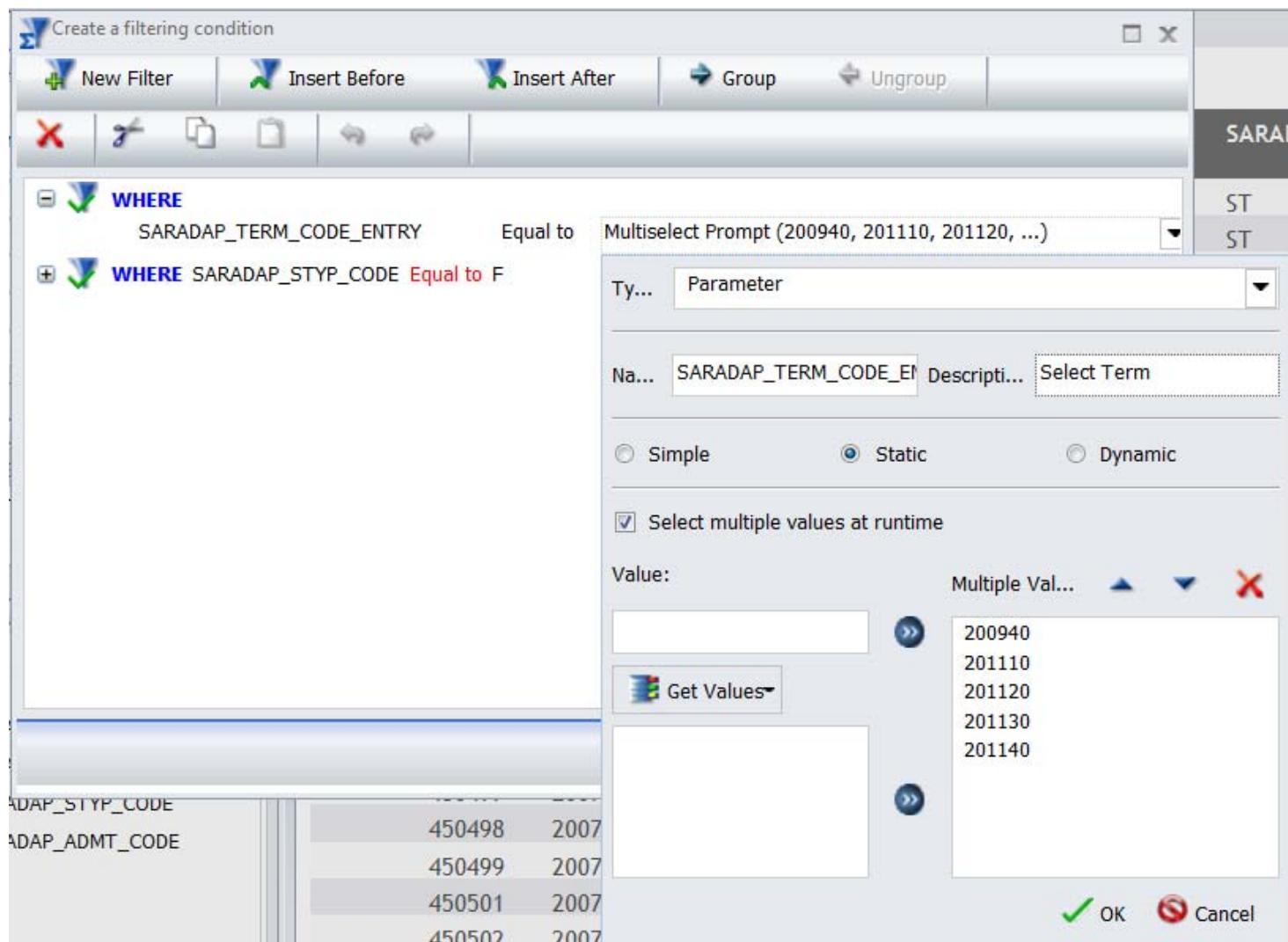


Right click on the 201110 part of saradap\_term\_code\_entry equals 201110 and select Edit. Change the type to Parameter. Change the description to Select Term.

Click the radio button for Static. Click the box for Select Multiple values at runtime.,

In the Value box enter the following 200940, 201110, 201120, 201130, 201140 you have to enter after each value you want to add.

Click OK. Run the report.



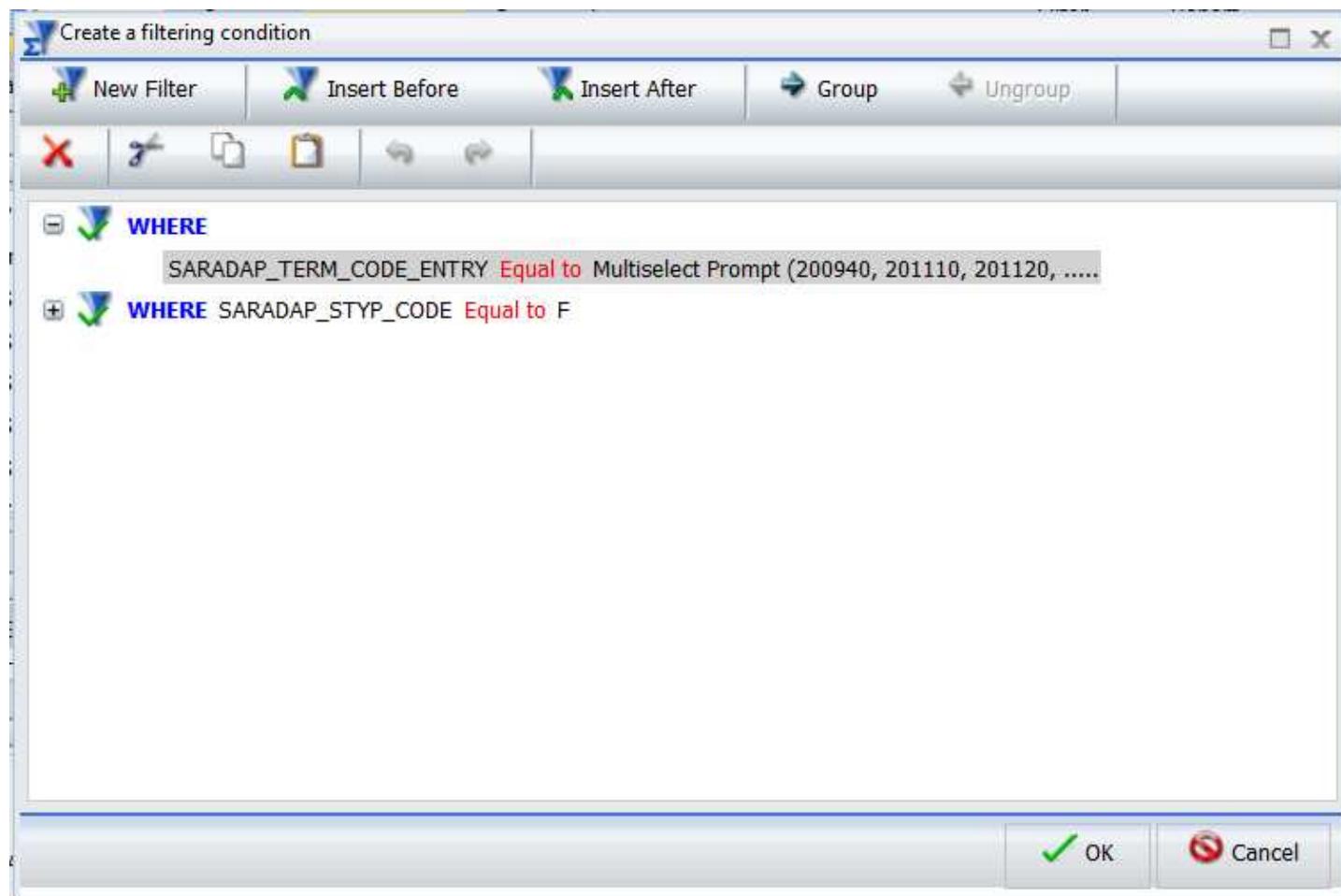
In the Filter window once again right click on saradap\_term\_code\_entry equal to Multi Select Prompt, select open, then select Advanced Filter.

You should see a window like what is pictured below.

Right click on the Multiselect Prompt and select Edit.

Leave the type as parameter

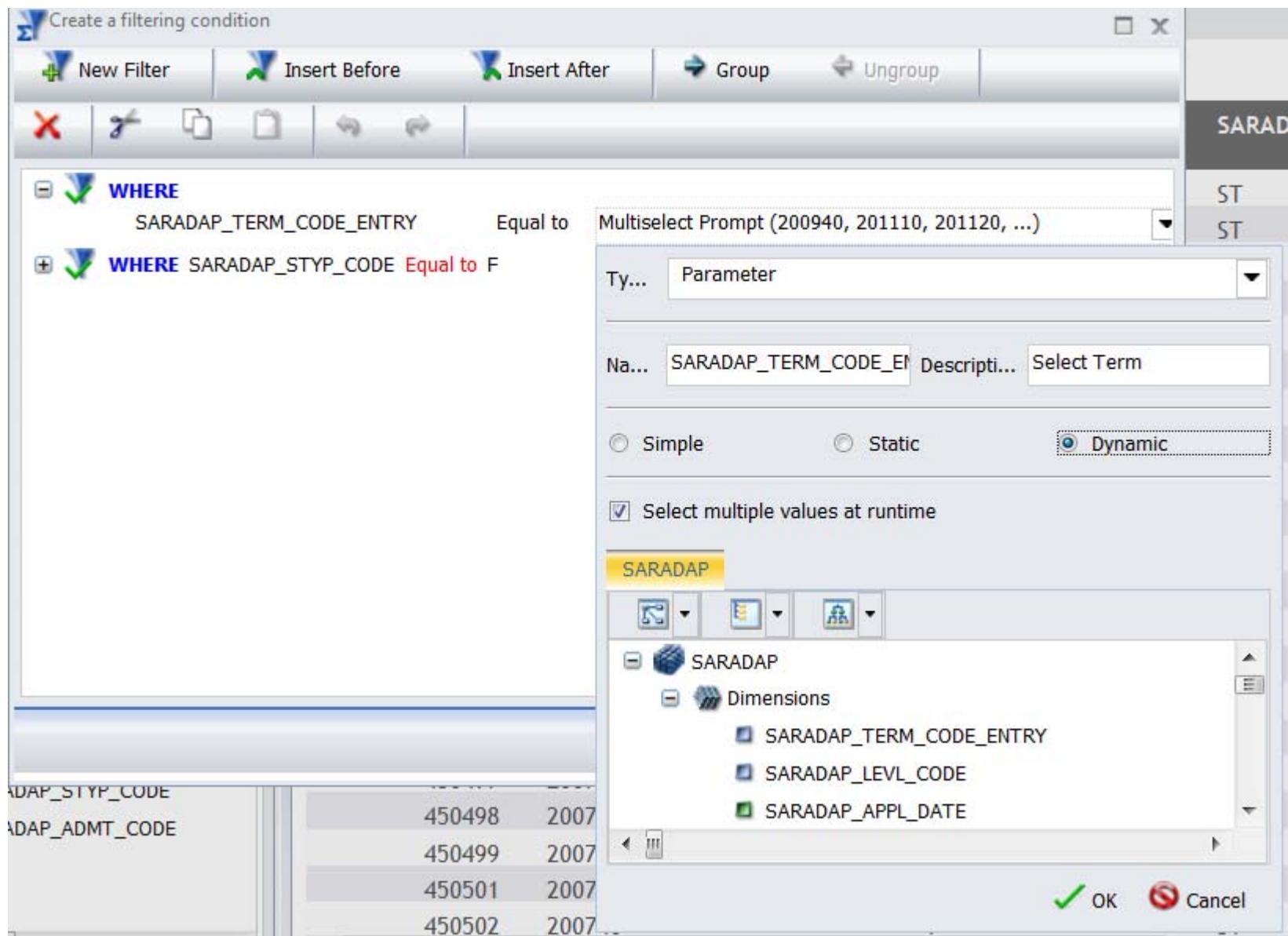
Click the radio button next to dynamic.



Remove the check in the box next to Select Multiple values at runtime. Select SARADAP\_TERM\_CODE\_ENTRY.

Then click OK until you are back at the design window.

Run the report now. Notice that you are only allowed to pick one term and the list of terms is all terms in the data.



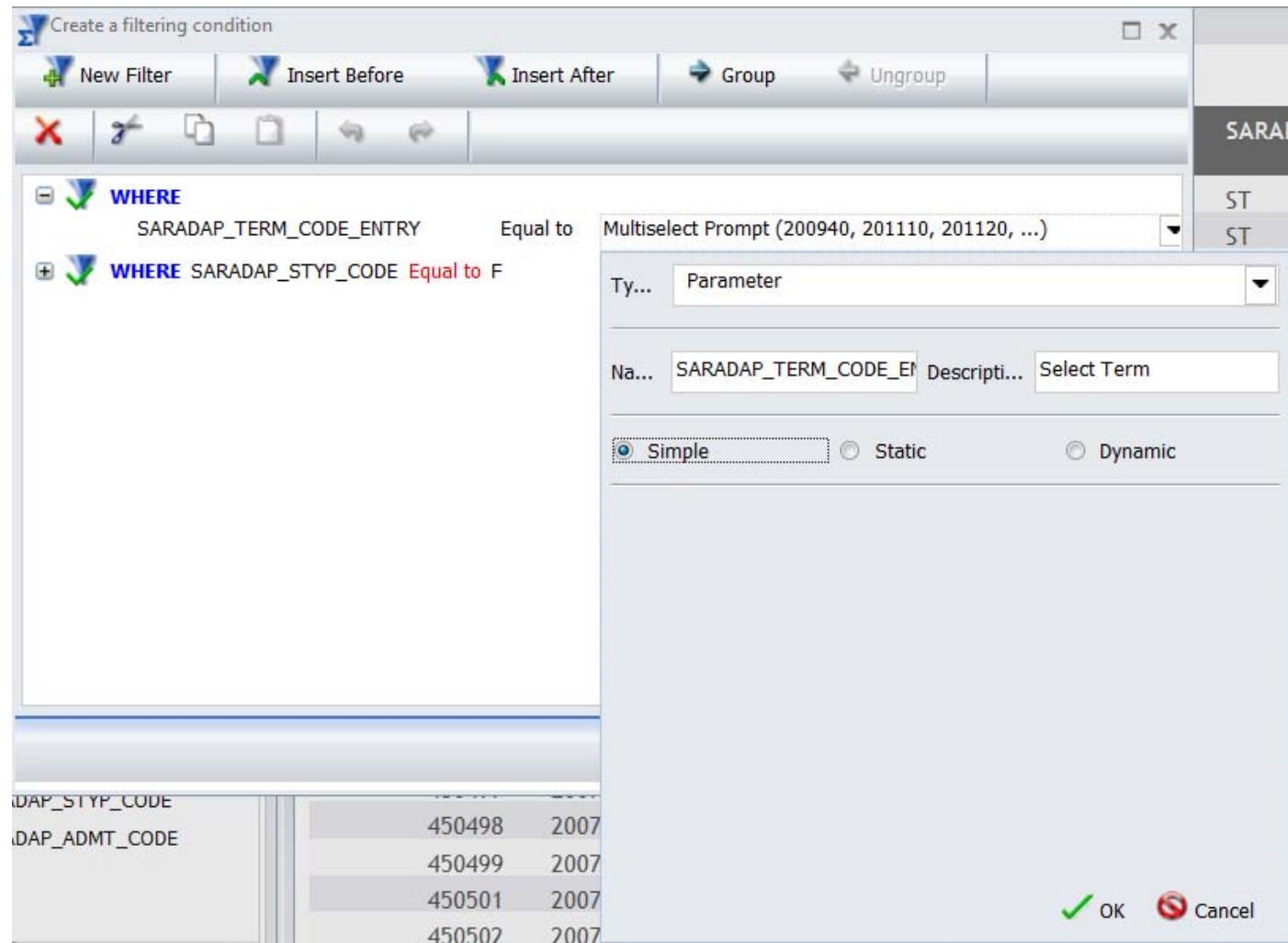
Right click once again on saradap\_term\_code\_entry equal to Dynamic prompt and select Open then select Advanced Filter.

Right click on Dynamic Prompt and select Edit.

Leave the type as Parameter. This time select the radio button next to simple.

Click Ok until you return to the design window. Run the report. Notice now you have to enter a term .

Close the report output, Click the IA icon and select Exit. It should prompt you to save, yes you want to save. You should be back at your folder under the Class folder.

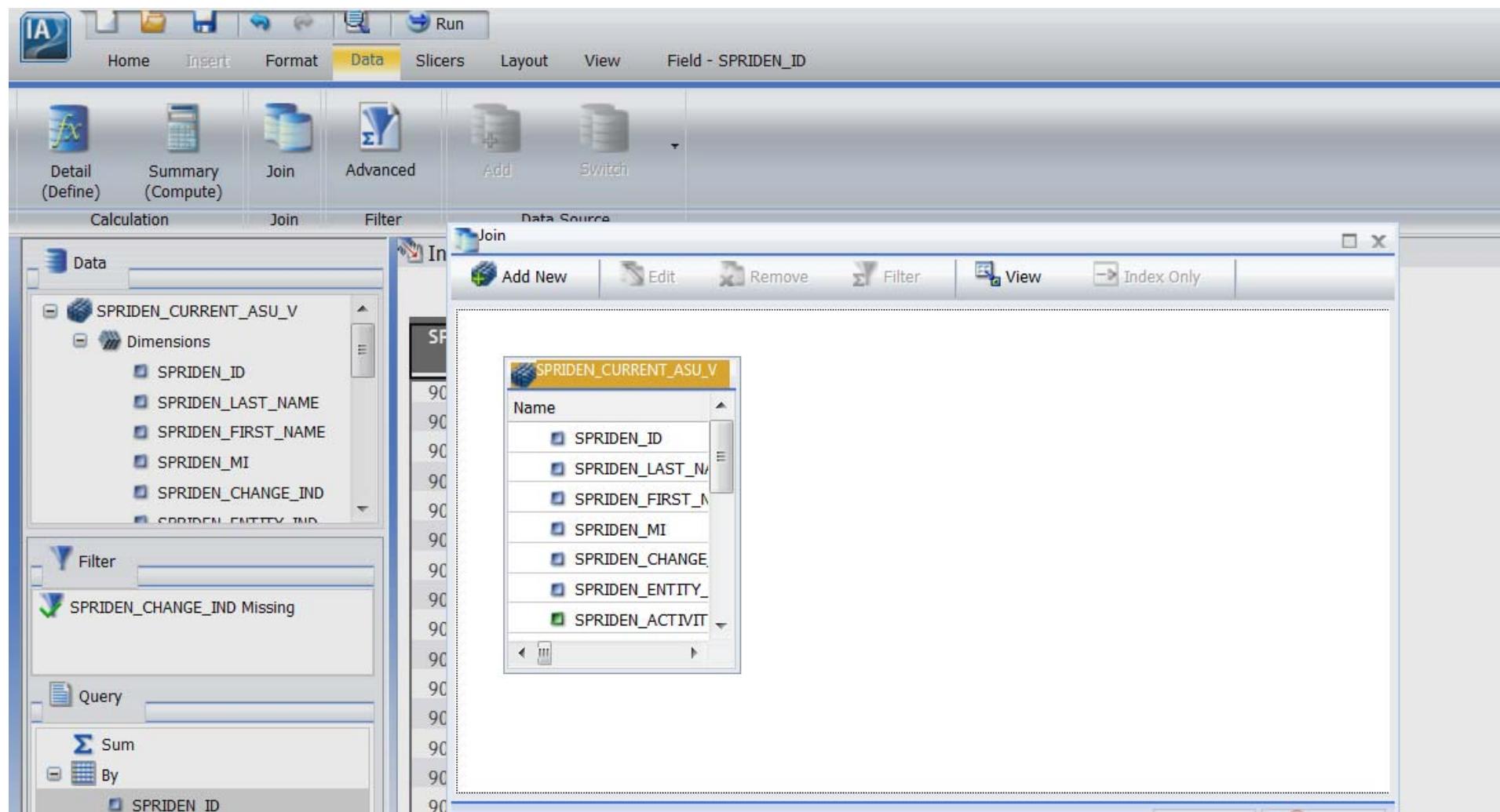


## Exercise 6.1

### Inner or Single JOIN

Right click on yourname31 in your folder and select Copy. Right click on your folder and select Paste. Right click on yourname31 (copy 1) and select Properties. Change name to yourname61 and click OK. Right click on yourname61 and select Open. The report will open in InfoAssist. Select spriden\_change\_ind in the Interactive Design View and right click, select Delete.

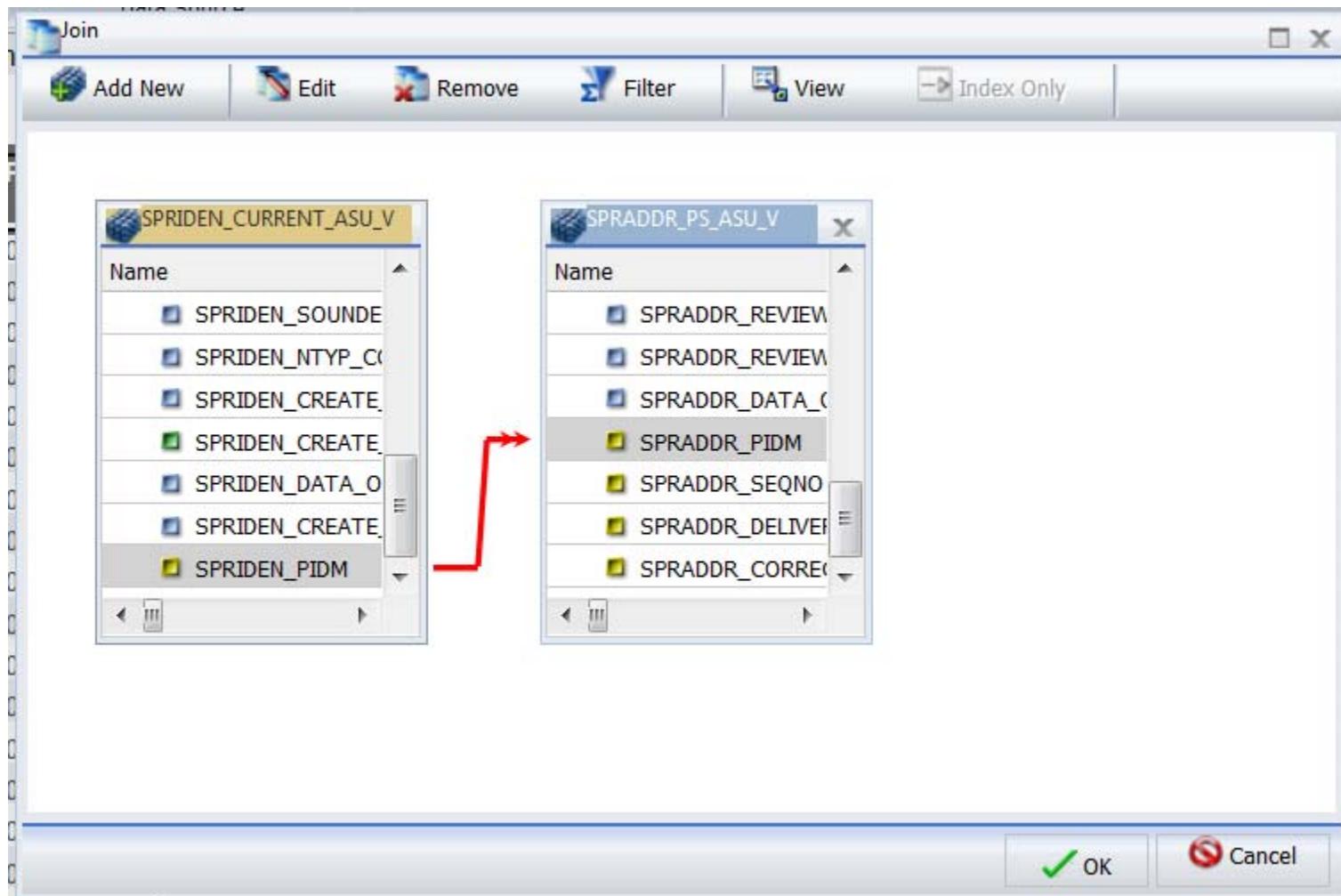
Click the DATA tab in the quick access toolbar. Click JOIN button. The Join dialog window is displayed.



In the Join dialog window click Add New button and select SPRADDR\_PS\_ASU\_V and click OK.

Scroll down until you find spriden\_pidm and click and drag to the spraddr\_ps\_asu\_v spraddr\_pidm.

Notice the arrow drawn between the two tables.



Double click the arrow between the 2 tables.

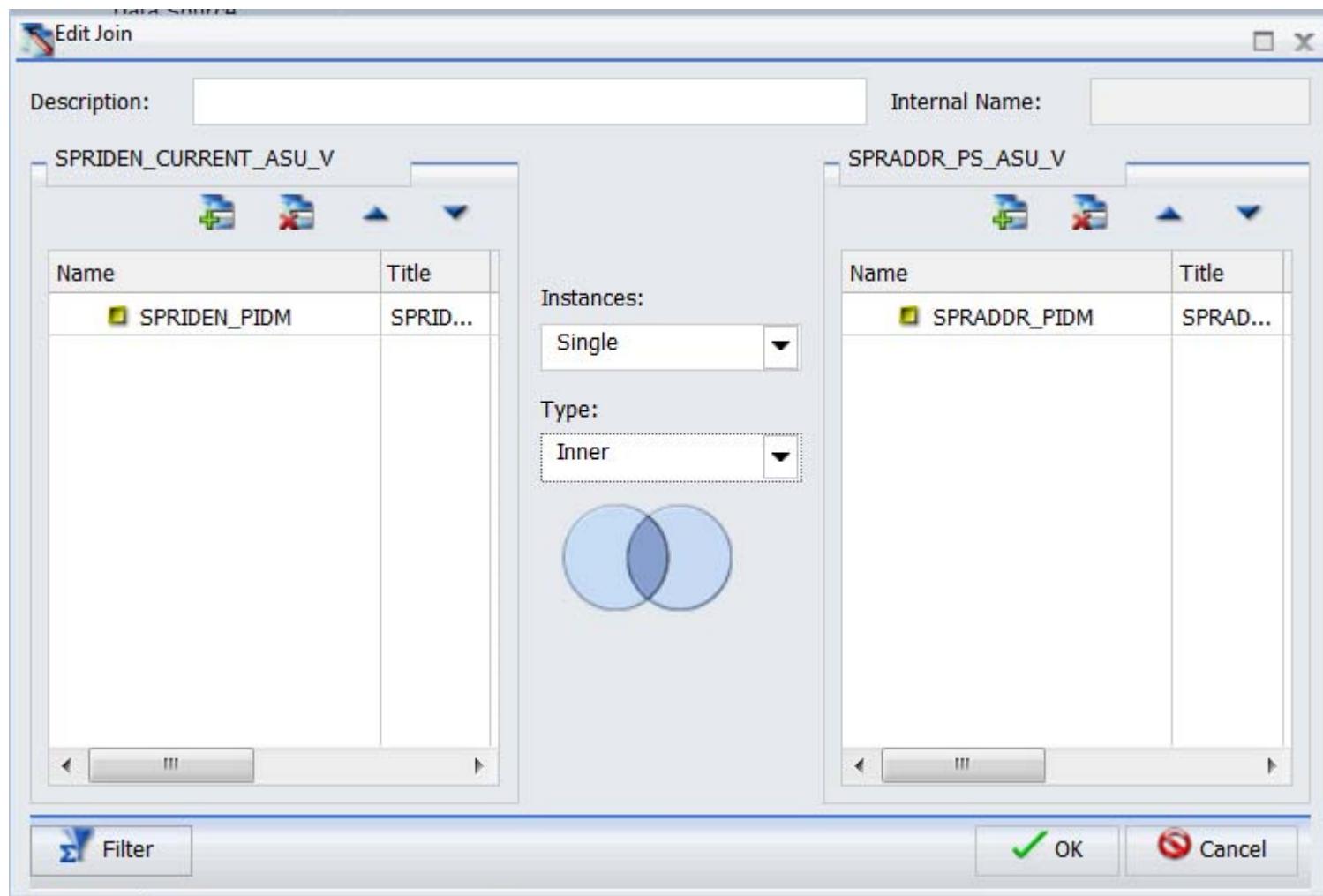
Change the Instances: Single

Change the Type: Inner

Notice the intersection of the two tables. That is a pictorial representation of a Single Inner or ONE to ONE relationship between the tables.

Click OK.

Click OK until you return to the Interactive design window.



Highlight spriden\_mi in the interactive design view then scroll down in the data window until you find Spraddr\_street\_line\_1, double click to get that field after spriden\_mi in the interactive design view.

Select spraddr\_city, spraddr\_stat\_code, and spraddr\_zip and double click to get in your report.

Your Interactive Design View should look like the picture below.

Run the report.

Save the report and exit back to your folder.

Interactive Design View

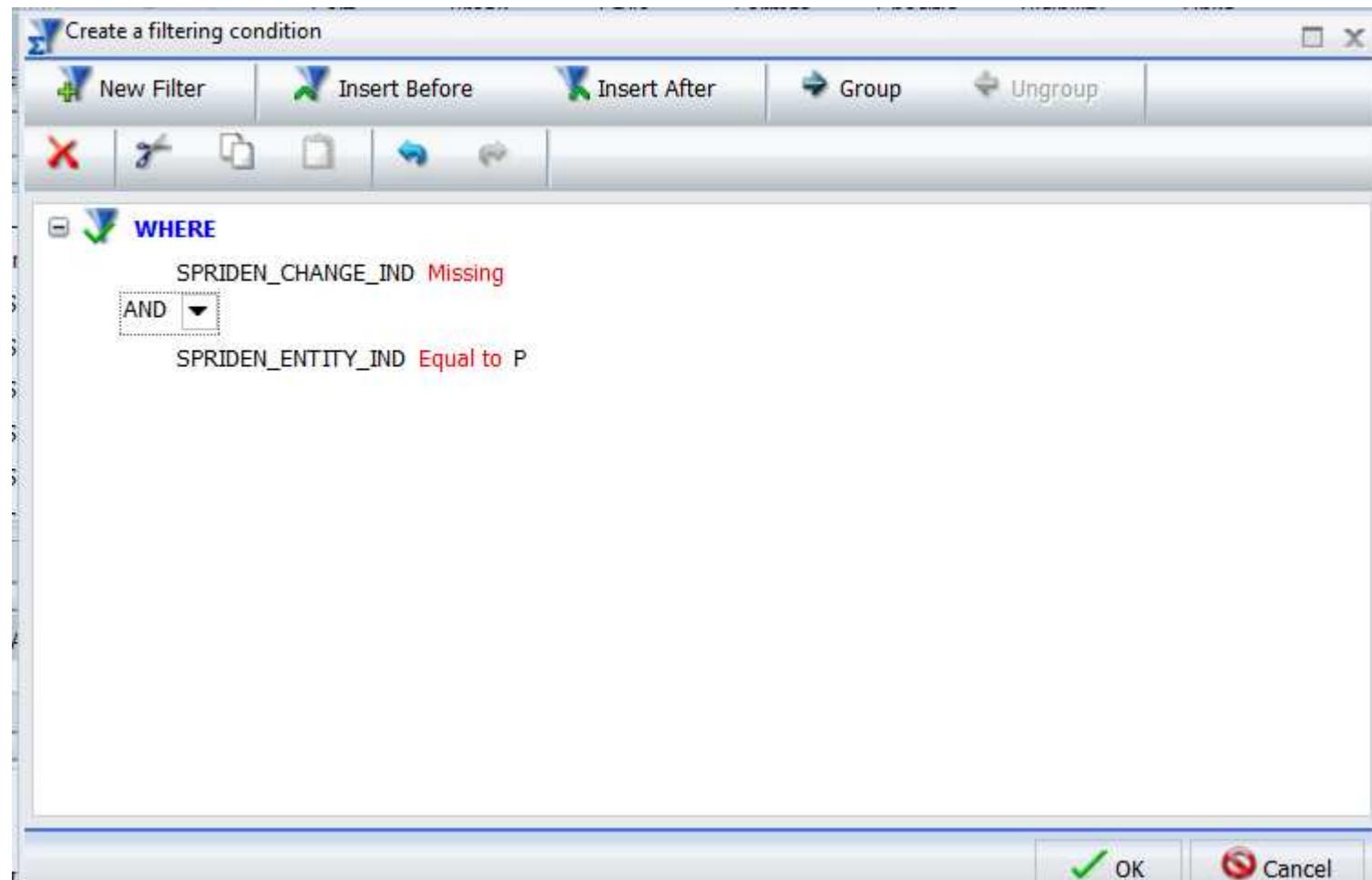
SPRIDEN_ID	SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SPRADDR_STREET_LINE1	SPRADDR_CITY	SPRADDR_STAT_C
900000027	Kershner	Amanda	Nicole	1102 Forest Wood Drive	Matthews	NC
900000028	Lampley	Audra	Bevan	318 Belwood Drive	Belmont	NC
900000029	Kirkpatrick	Rickey	C.	174 Hemlock Drive	Boone	NC
900000032	Turner	Elizabeth	Ausley	5 Grace Avenue	Asheville	NC
900000033	Pridgen	Amy	Michelle	2070 Vance Street	Newton	NC
900000034	Carzoli	Annemarie	Page	1684 Ashebark Court	Marietta	GA
900001005	Moll	Krista	Beth	5710 Cabe Ford Road	Durham	NC
900001006	Nunn	Tasha	Noel	251 Piney Top Drive	Millers Creek	NC
900001007	Karabinis	Nikki	Virginia	1212 Old Bristol Road	Boone	NC
900001008	Orff	Brandon	Richard	8901 Olive Dairy Rd.	Apex	NC
900001009	Pinders	Dori	Lynne	121 Cat Hole Road	Claremont	NH
900001010	Bickers	Kimberly	Ann	520 Hickory Drive	Mountain City	TN
900001012	Fisher	Katherine	Olson	442 Poplar Hill Drive	Boone	NC
900001015	Halloran	Jessie	Frank	2801 Corrie Road	Charlotte	NC

## Exercise 6.2

### Left outer JOIN

Right click on yourname31 in your folder and select Copy. Right click on your folder and select Paste. Right click on yourname31 (copy 1) and select Properties. Change name to yourname62 and click OK. Right click on yourname62 and select Open. The report will open in InfoAssist. Select spriden\_change\_ind in the Interactive Design View and right click, select Delete. Select spriden\_id in the Interactive Design view and right click , select Delete.

Add a filter for Spriden\_entity\_ind equal to P.



Click the DATA tab in the quick access toolbar. Click JOIN button. The Join dialog window is displayed.

Click Add New, Select SHRTRCE.

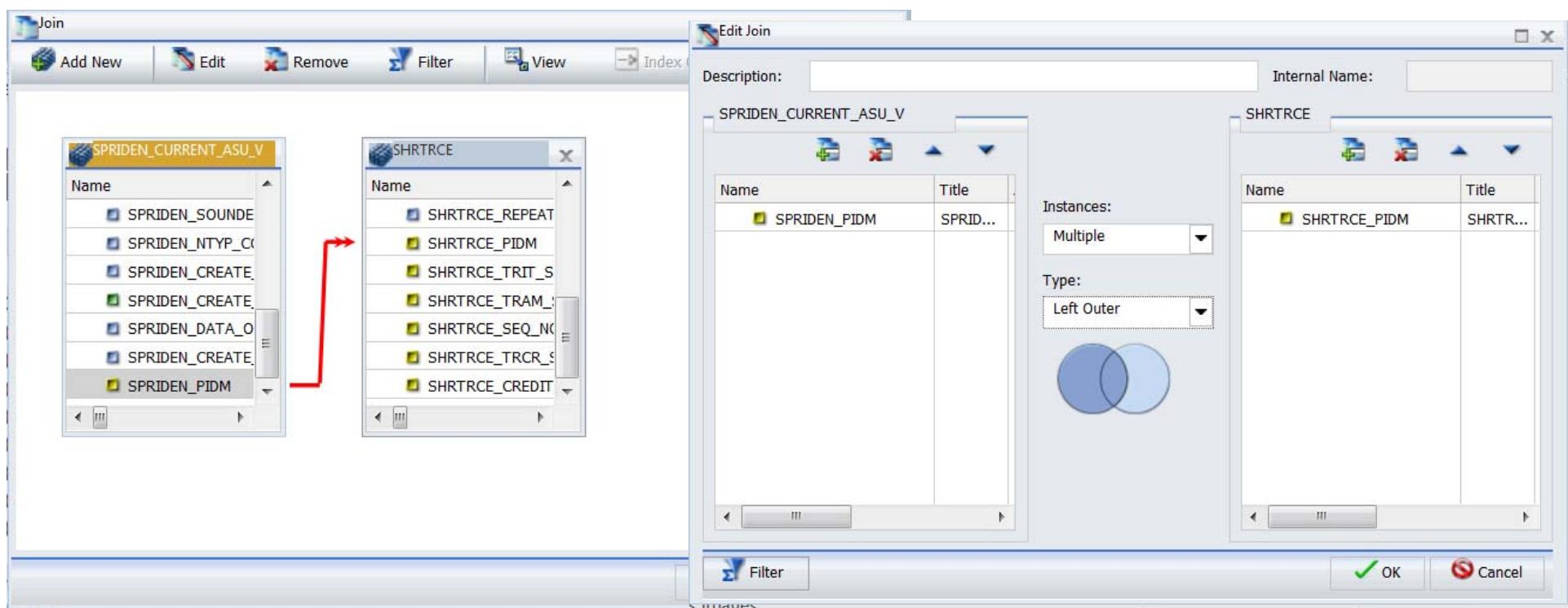
Scroll down until you find spriden\_pidm and click and drag to the shrtrce\_shrtrce\_pidm.

Notice the arrow drawn between the two tables. Double Click the Arrow between the two tables.

Change the Instances to Multiple if it is not already. Notice the graphic depicting a ONE to MANY relationship.

Change the Type to Left Outer.

Click OK. Click OK again to return to the Interactive Design View.



Highlight spriden\_mi in the Interactive Design View. Scroll down and find the following in the data window and add to your report after spriden\_mi. Shrtrce\_sub\_code, shrtrce\_crse\_numb, and shrtrce\_crse\_title.

Grab shrtrce\_term\_code\_eff and drag to the Filter area. Create the filter shrtrce\_term\_code\_eff equal to 201040.

Add a title to your report— Course List for Students for Term 201040

Run and Save your report.

Exit back to your folder.

The screenshot shows the Oracle BI Interactive Design View interface. The top menu bar includes Calculation, Join, Filter, and Data Source tabs. The left sidebar contains a Data tree with columns like SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, SPRIDEN\_MI, SHRTRCE\_SUBJ\_CODE, SHRTRCE\_CRSE\_NUMB, and SHRTRCE\_CRSE\_TITLE. A Filter section lists two conditions: SPRIDEN\_CHANGE\_IND Missing and SPRIDEN\_MI Equal to 201040. A Query section shows a Sum operation by SPRIDEN\_LAST\_NAME. The main area displays a data grid with the following rows:

SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	SHRTRCE_SUBJ_CODE	SHRTRCE_CRSE_NUMB	SHRTRCE_CRSE_TITLE
Byrd	Jacob	Andrew	REL	1110	RELIGIONS OF THE WORLD
Earp	Daniel	Reid	ACC	2100	PRIN OF ACCOUNTING I
			BIO	2110	PRIN OF ACCOUNTING II
				1101	BIOLOGY IN SOCIETY I
				1102	BIOLOGY IN SOCIETY II
			BUS	ELEC	BUS ELECTIVE CREDIT
			COM	2101	PUBLIC SPEAKING
			ECO	2030	PRIN ECON-PRICE THEORY
				2040	PRINC OF ECON - MACRO
				2100	BUS & ECO STATISTICS I
			ELE	CRED	ELECTIVE CREDIT
			ENG	1000	EXPOSITORY WRITING
				ELEC	ENG ELECTIVE CREDIT
			GEP	MAT	QUANTITATIVE LITERACY CRED
			LIC	1200	AMERICAN HISTORY

## Exercise 7.1

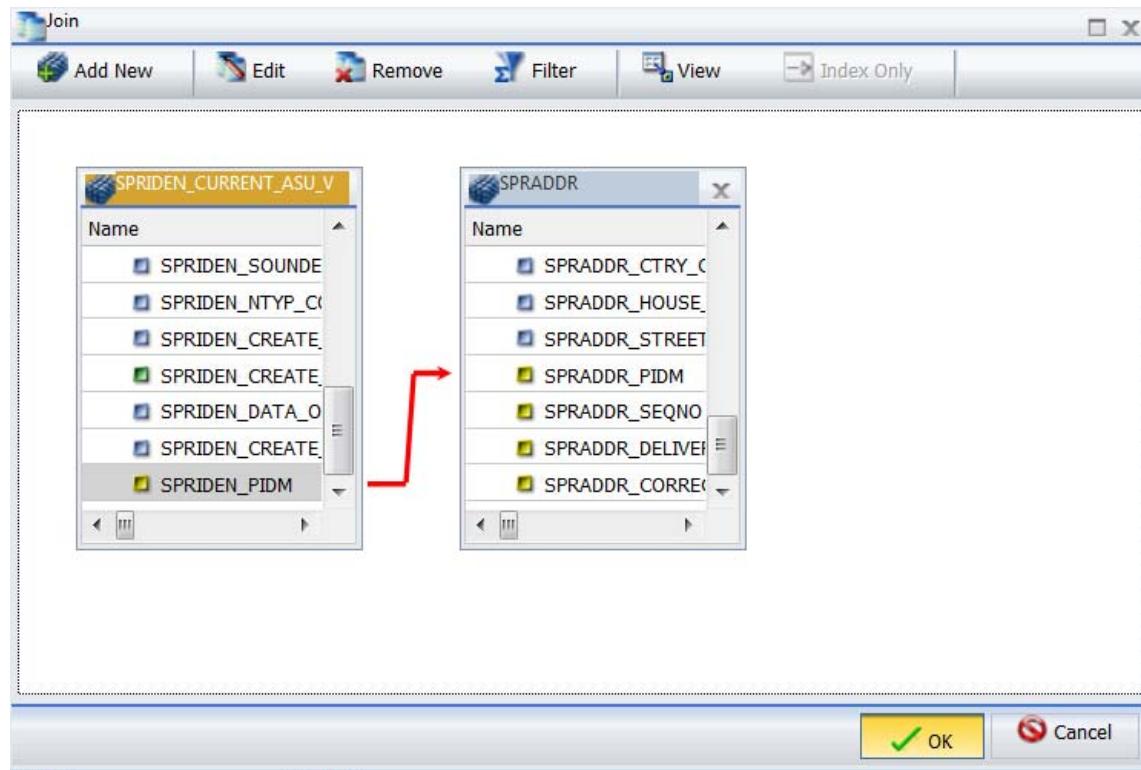
### Using DEFINE to create a nice formatted telephone number

Right click on yourname31 and select Copy. Right click on yourname folder and select paste. Right click on yourname31 (copy 1) and select properties. Type yourname71 in the name box and click OK.

Right click on yourname71 and select Open.

Remove Spriden\_change\_ind and Spriden\_id from the report by right clicking and select Delete

Create a SINGLE INNER join to spraddr by clicking on the data tab and clicking the JOIN button. Click Add New button in the JOIN dialog and pick spraddr from the list of tables available. Highlight spriden\_pidm, click and drag to spraddr\_pidm. Double click the arrow between the two tables and change instances to SINGLE and type to INNER . Click OK until you return to the Interactive Design view.



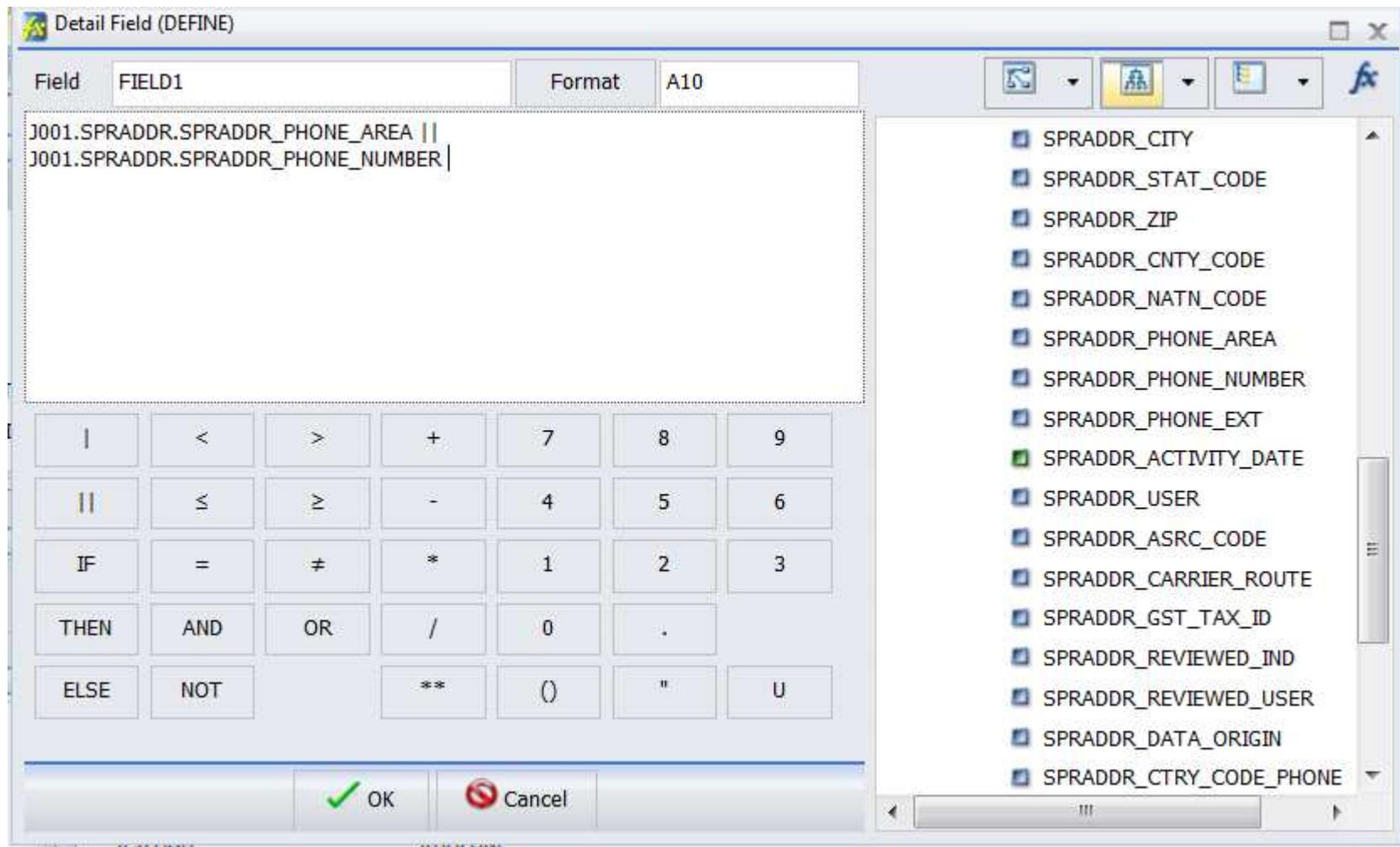
On the Data Tab Click the DEFINE Button. First we will get the phone number in one field by using concatenation.

Enter FIELD1 in the Field name box. Enter A10 in the Format Box.

Double click spraddr\_phone\_area click the || symbol in the calculator or type it.

Double click spraddr\_phone\_number

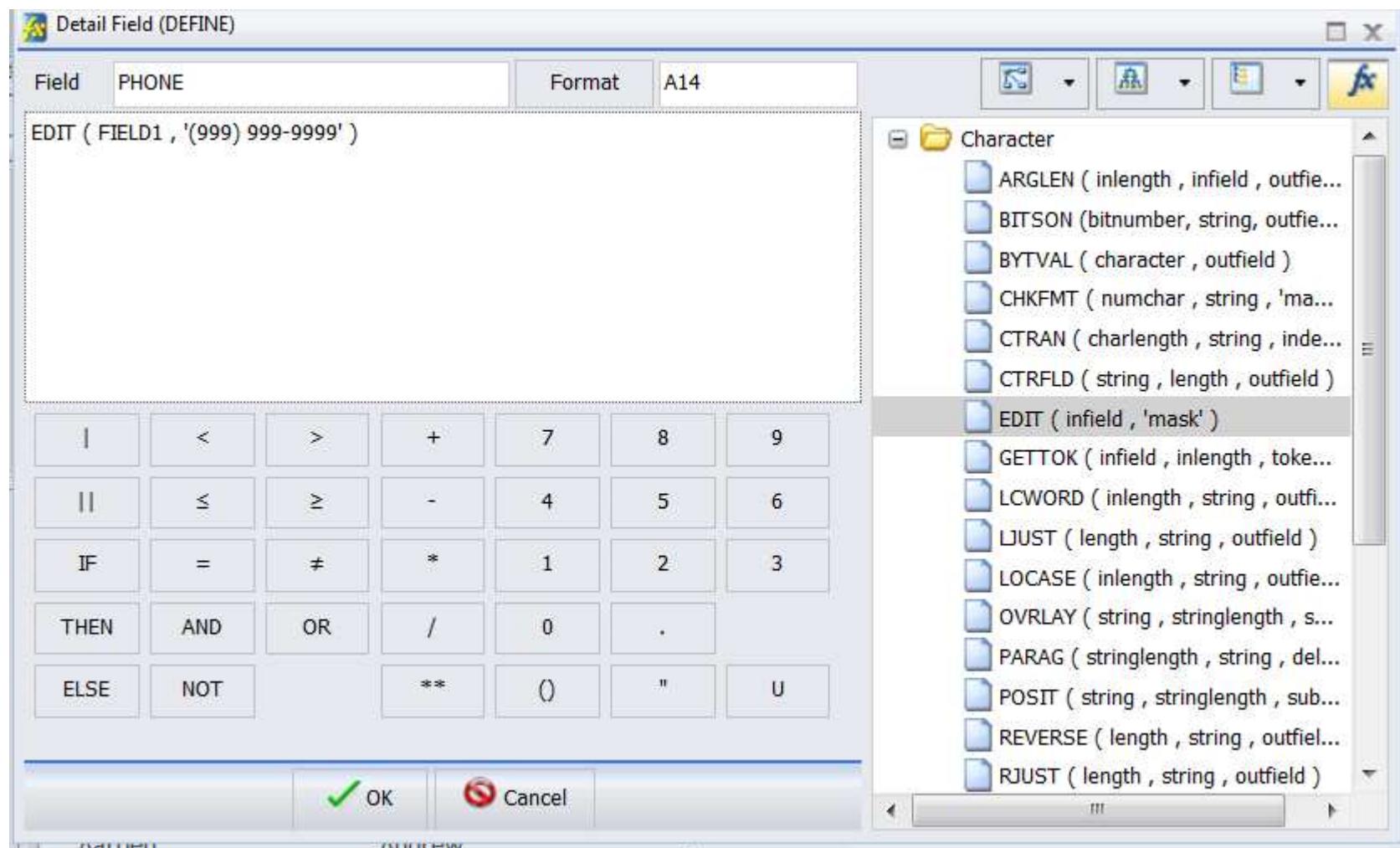
Your define should look like the one below. Click OK.



Click the DEFINE button again. The Field name will be PHONE. The Format will be A14. Place your cursor in the expression box and click the Functions button on the right corner of the define dialog. Expand the Character functions by clicking the plus sign and scroll to EDIT. Double click EDIT and you will see it is added to the expression box.

Replace infield with FIELD1. Replace mask with (999) 999-9999.

Your PHONE field should look just like what is below. Click OK to return to the interactive design view.



Scroll down in the DATA window until you find your FIELD1 and PHONE field you just created and add them to your report after spriden\_mi.

Run the report. How does that look? Close the output window. Click the IA icon and select exit. Yes you want to save.

You should be back at your folder again.

SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	SPRIDEN_MI	FIELD1	PHONE
Abbott	Paige	Willow	( ) -	
			8282623070	(828) 262-3070
			8282645938	(828) 264-5938
	Richard	N.	( ) -	
			8282623055	(828) 262-3055
			8282640993	(828) 264-0993
Arsenault	Jennifer	Lynn	( ) -	
			0000000000	(000) 000-0000
Beaulieu	Elizabeth	A.	( ) -	
			8282627603	(828) 262-7603
			8289631841	(828) 963-1841
Bickers	Kimberly	Ann	( ) -	
			0000000000	(000) 000-0000
Bordeaux	Elizabeth	Cone	( ) -	
			8282624089	(828) 262-4089
			8282650037	(828) 265-0037
Botelho	Christopher	Michael	( ) -	
Burns	Colleen	K.	( ) -	
			0000000000	(000) 000-0000
Cartaya-Marin	Claudia	P.	( ) -	
			8282622763	(828) 262-2763
			8282971090	(828) 297-1090

## Exercise 7.2

### Create a SUB GPA report for students using a COMPUTE

This time you are going to create a report from scratch. Right click in your folder and Select InfoAssist. Click build a Report from the splash screen. Select ASU\_STUDENT\_COURSE from the open dialog window and click OK.

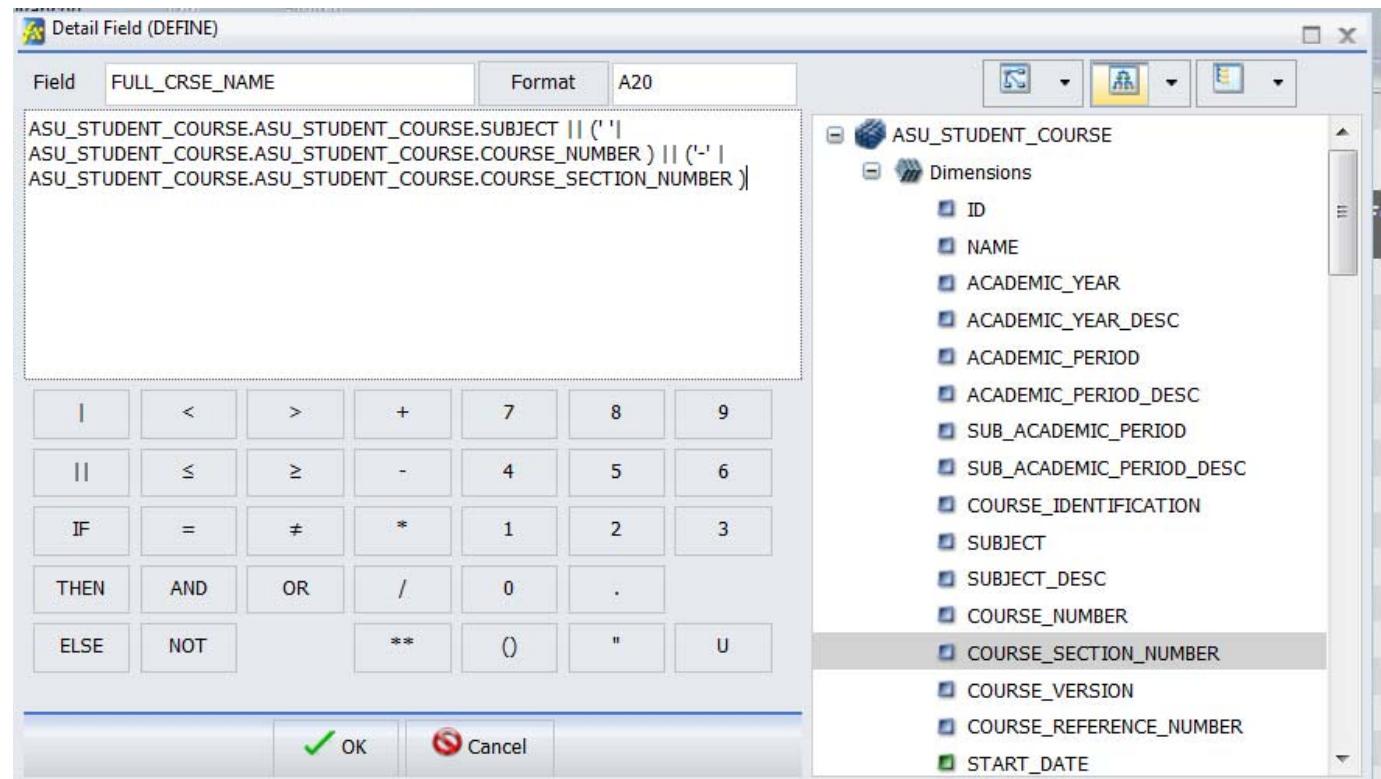
Add NAME, ID, COLLEGE\_DESC to the report.

Create a DEFINE field called FULL\_CRSE\_NAME by going to the data tab and clicking the DEFINE button.

Field = FULL\_CRSE\_NAME Format = A20

Double click SUBJECT field to get it in the expression box, click or type || (double bar), add a left paren, add a single quote, space, single quote, single bar (|), double click COURSE\_NUMBER, add a right paren, click or type || (double bar), add a left paren, a single quote, a dash, a single quote, a single bar (|), double click COURSE\_SECTION\_NUMBER, add right paren. Click OK

SUBJECT || ('' | COURSE\_NUMBER) || ('-' | COURSE\_SECTION\_NUMBER)



Add FULL\_CRSE\_NAME to the report after COLLEGE\_DESC.

Add QUALITY\_POINTS and CREDITS\_FOR\_GPA to the report after FULL\_CRSE\_NAME.

Drag CREDITS\_FOR\_GPA to the filter box and create a filter for CREDITS\_FOR\_GPA not equal to 0 (zero).

Click on the slicers tab and set the preview to 50 and run time to 500.

Click on the Data Tab and click the COMPUTE button.

The screenshot shows the Microsoft Analysis Services Interactive Design View interface. The top ribbon has tabs: Home, Insert, Format, Data, Slicers (which is selected and highlighted in yellow), Layout, View, and Field. The Slicers tab contains controls for 'New Group' (with a 'Preview' dropdown set to 50), 'Clear Slicers' (with a 'Run Time' dropdown set to 500), and 'Update Previous' (with a 'Record Limit' dropdown set to 500). Below the ribbon is a large data grid titled 'Interactive Design View'. The grid has columns: NAME, ID, COLLEGE\_DESC, FULL\_CRSE\_NAME, QUALITY\_POINTS, and CREDITS\_FOR\_GPA. The data grid contains 15 rows of student information. On the left side of the interface is a 'Data' pane containing a tree view of fields: REGISTRATION\_SEQUENCE, COURSE\_BILLING\_CREDITS, CREDITS\_ATTEMPTED, CREDITS\_PASSED, CREDITS\_FOR\_GPA (which is selected and highlighted in grey), CREDITS\_EARNED, QUALITY\_POINTS, and COURSE\_CREDITS. Below the tree view is a 'Filter' section with a dropdown menu showing 'CREDITS\_FOR\_GPA Not equal to 0' with a checked checkbox. At the bottom of the Data pane are sections for 'Query' (with 'QUALITY\_POINTS' and 'CREDITS\_FOR\_GPA' selected) and 'By' (with 'NAME' selected).

NAME	ID	COLLEGE_DESC	FULL_CRSE_NAME	QUALITY_POINTS	CREDITS_FOR_GPA
Allie, Jonathan C.	900227624	.	ART 1011-107	6.00	3.00
Alvarez, Valerie S.	900226285	.	C I 2800-110	12.00	3.00
Ayers, David E.	900224499	.	COM 3305-103	11.10	3.00
Bailey, Tonya H.	900224387	.	CMA 1100-111	7.40	2.00
Benson, Robert S.	900373396	.	HED 3500-101	12.00	3.00
Bottoms, Richard T.	900228097	.	P R 2020-105	6.00	3.00
Bowman, Brian R.	900227837	.	FDN 3100-103	8.00	2.00
Buchanan, Nathaniel S.	900373109	.	C I 2800-110	12.00	3.00
Carpenter, Richard K.	900298486	.	STT 3820-101	.00	3.00
Carter, Mary K.	900373486	.	U S 1150-105	12.00	3.00
Carver, Amy E.	900298495	.	P E 3001-101	12.00	3.00
Church, Tonya D.	900301666	.	PSY 2301-101	9.90	3.00
Clayton, Jeremy M.	900229690	.	R M 4110-101	9.00	3.00
Clutz, Leslie P.	900300932	.	H P 1105-107	8.00	2.00
Dale, Kelly D.	900227724	.	ACC 2100-102	9.00	4.00

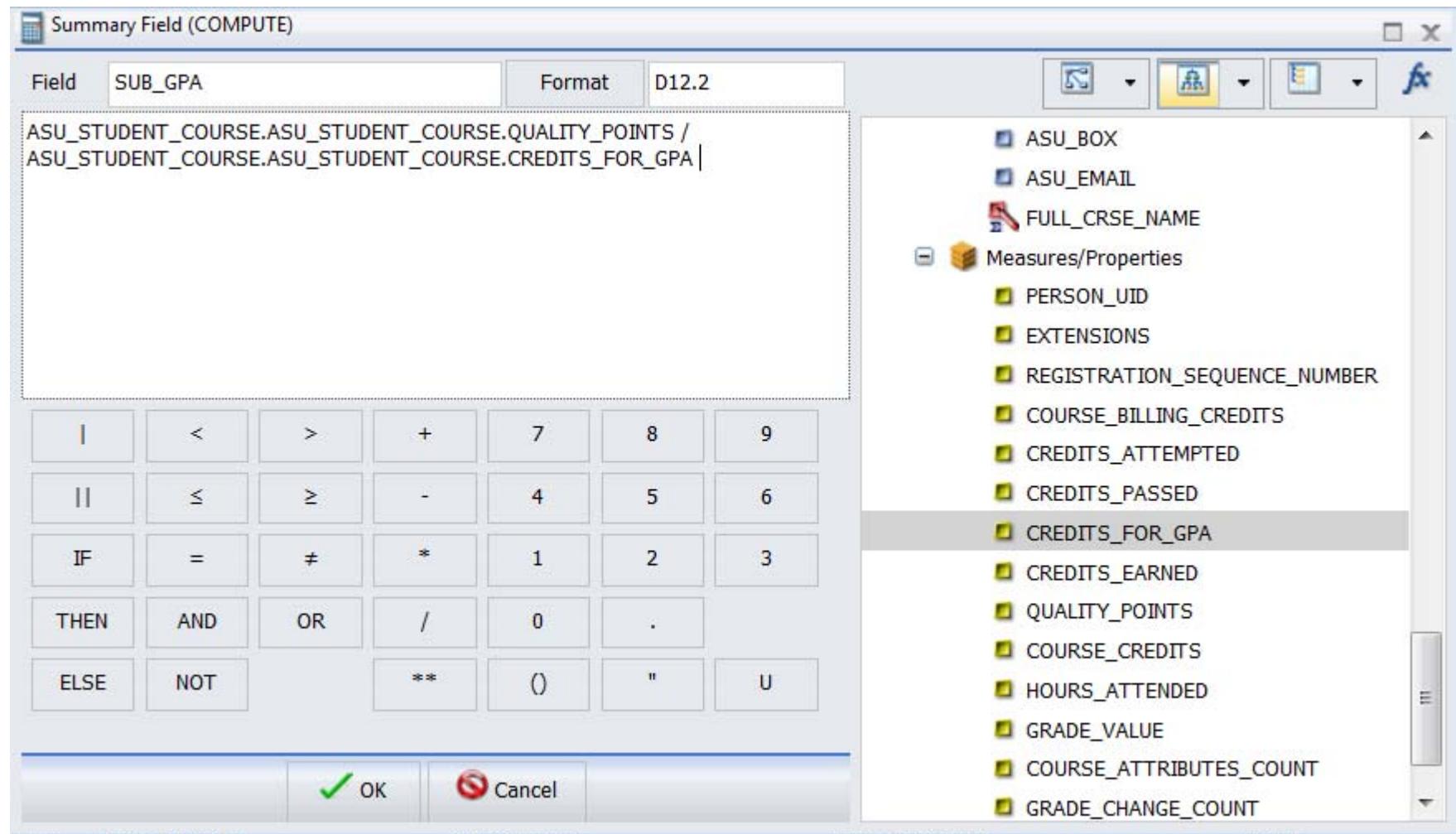
The Field name = SUB\_GPA leave the Format D12.2. Click in the expression box to get your cursor there.

Find and click QUALITY\_POINTS to add it to the expression box.

Click the / button or type it. (divided by)

Find and click CREDITS\_FOR\_GPA to add it to the expression box.

Click OK. Notice the new computed field is added to the report as the last field. Run the report, close the output window. Save and exit to return to your folder.



## Exercise 8.1

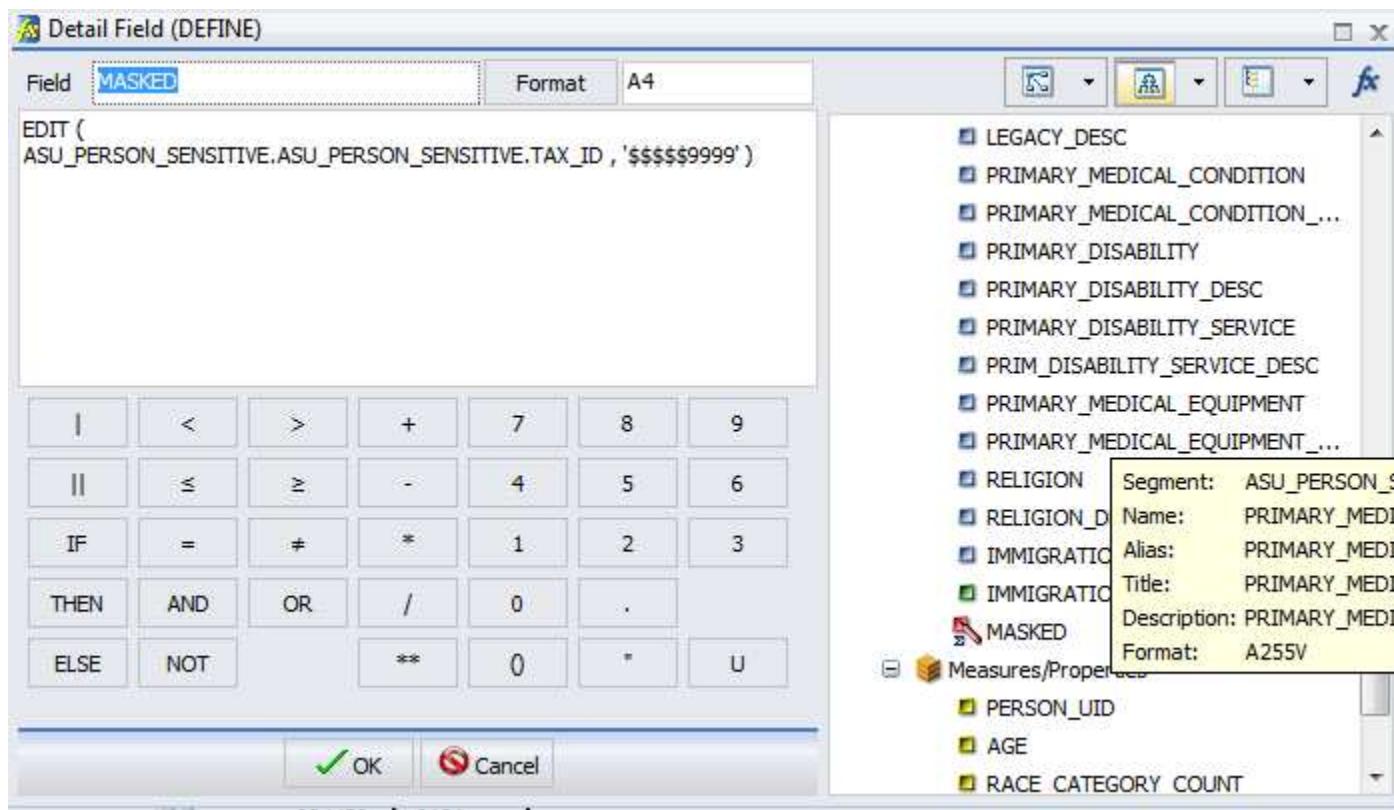
### EDIT

Create a new report called yourname81 using ASU\_PERSON\_SENSITIVE. Add FIRST\_NAME to the report as a BY field. Now we are going to use EDIT to make the TAX\_ID show only the last four characters.

Go to the Data tab and click the DEFINE button. Name the field MASKED Format = A4

Click the function button and open the character functions and click EDIT to get the EDIT function in the expression window.

Replace infield with TAX\_ID. Replace mask with the following— \$\$\$\$\$9999 Click OK.



You now have a field with only the last 4 characters for the TAX\_ID. Add MASKED to your report.

Go to the Slicers tab and set Preview to 50 and Runtime to 500. Run your report. Save the report as yourname81 and exit to return to your folder.

The screenshot shows the Microsoft Analysis Services Interactive Design View interface. The top menu bar includes Home, Insert, Format, Data (selected), Slicers, Layout, View, and Field. Below the menu are toolbars for Detail (Define), Summary (Compute), Join, Advanced, Add, and Switch. The main area is titled "Interactive Design View" and displays a data grid with columns FIRST\_NAME and MASKED. The data grid contains 20 rows of names and their corresponding masked values. To the left of the grid is a "Data" pane showing a hierarchy under "MASKED" with "Measures/Properties" expanded, listing PERSON\_UID, AGE, RACE\_CATEGORY\_COUN, RACE\_COUNT, and MEDICAL\_INFORMATION. Below the Data pane are "Filter" and "Query" panes. The "Query" pane shows a Sum operation by FIRST\_NAME, with "MASKED" selected. The bottom of the interface shows a status bar with "100%".

FIRST_NAME	MASKED
Alice	2100
Amy	9174
Angell	2982
Ann	5889
Bernadette	8768
Betty	3116
Bonnie	2041
Brian	3889
Cameron	9863
Casey	6558
Christopher	6635
Constance	2529
Curtis	9593
Debora	4571
Denny	4318
Donald	7320
Eric	3527
Floyd	2989
J.	6857
Jeffrey	9741
Jerry	3196

## Exercise 8.2

### HDATE

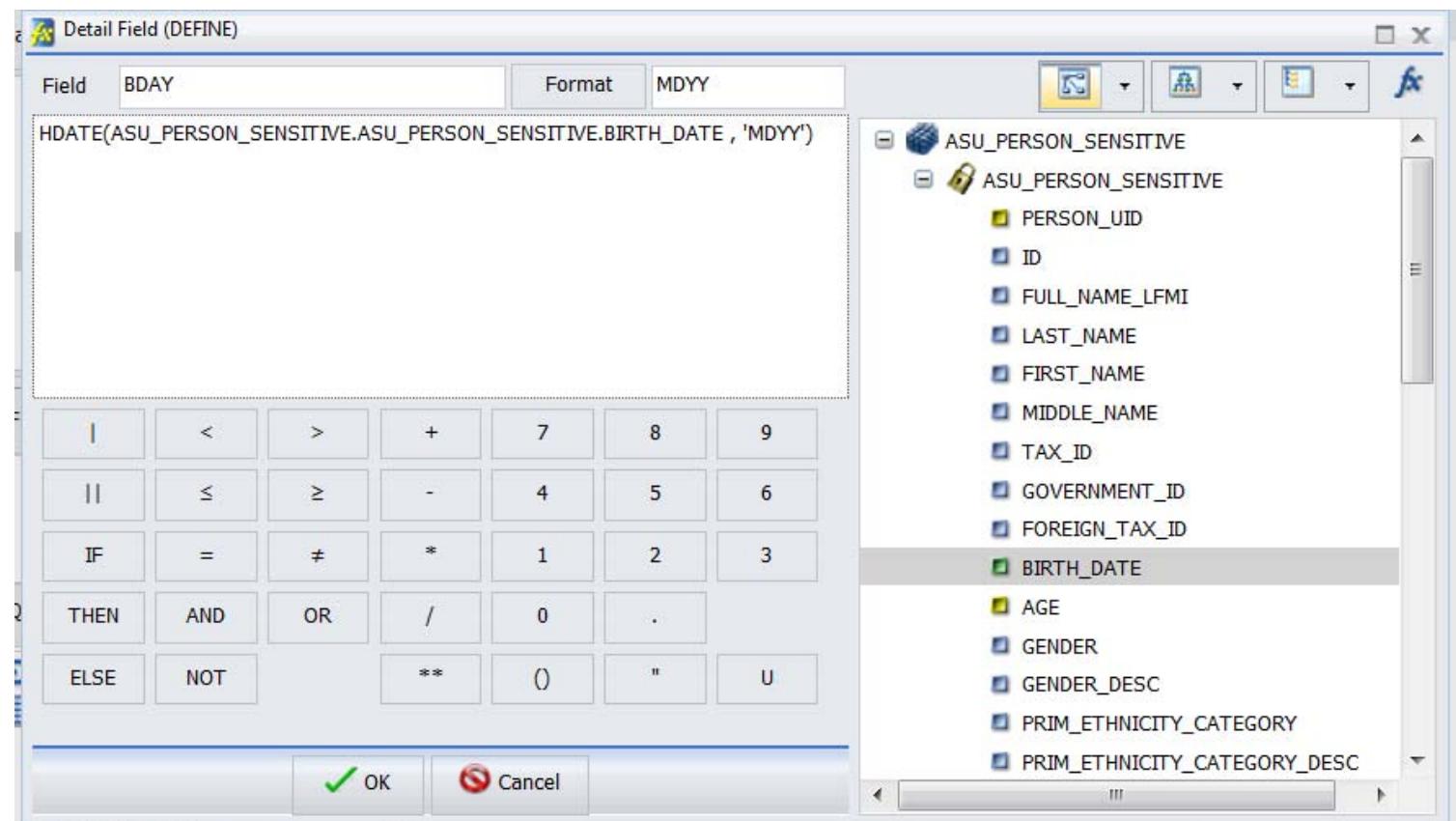
Copy yourname81, rename yourname81 (Copy 1) to yourname82. Right click on yourname82 and select Open.

Add BIRTH\_DATE to the report after MASKEDSS. Switch to the Data tab and Click on DEFINE button to create a new defined field.

Name the Field to BDAY set the FORMAT to MDYY

Click in the expression window to get your cursor there. Click on the Function Button, expand the Date and time folder and scroll to HDATE and click to get it in the expression window.

Replace DTinfield with BIRTH\_date from the field list. Change YYMD to MDYY to match the format of your new field. Click OK.



Add BDAY to the report after BIRTH\_DATE. Check Slicer tab to be sure your Run time is set to 500. Run the report. Close the output window.

Exit and save. You should be back at your folder.

The screenshot shows the Microsoft Analysis Services Interactive Design View interface. The top ribbon has tabs: Home, Insert, Format, Data, Slicers (selected), Layout, View, and Field. The Slicers tab includes options for New Group, Clear Slicers, and Run Time (set to 500). The main area is titled "Interactive Design View" and displays a table with four columns: FULL\_NAME\_LFMI, MASKEDSS, BIRTH\_DATE, and BDAY. The table contains 15 rows of data. On the left, the "Data" pane shows dimensions like RELIGION, IMMIGRATION\_STATUS, and MASKEDSS, and measures like BDAY. The "Filter" and "Query" panes are also visible.

FULL_NAME_LFMI	MASKEDSS	BIRTH_DATE	BDAY
Aldoescu, Alexandru J.	3331	1987/07/13 00:00:00	07/13/1987
Allen, Sandra J.	2616	1946/05/16 00:00:00	05/16/1946
Babb, Tara M.	6335	1983/09/22 00:00:00	09/22/1983
Bartlett, Rebecca S.	0567	1979/11/21 00:00:00	11/21/1979
Beebe, Karen L.	1489	1975/02/14 00:00:00	02/14/1975
Bieganski, Marianne S.	9331	1986/10/01 00:00:00	10/01/1986
Bresell, Nancy C.	4716	1948/01/14 00:00:00	01/14/1948
Brooks, Joseph B.	4595	1932/05/24 00:00:00	05/24/1932
Brown, Janet E.	2097	1967/05/06 00:00:00	05/06/1967
Brown, Sheila	9328	1965/07/05 00:00:00	07/05/1965
Cacciola, Alex	7731	1984/12/10 00:00:00	12/10/1984
Calhoun, Sarah M.	2035	1987/01/19 00:00:00	01/19/1987
Caudill, Dana E.	4380	1984/08/04 00:00:00	08/04/1984
Champigny, Heather	7517	1947/06/15 00:00:00	06/15/1947

## Exercise 8.3

### SUBSTR

Create a new report using TBRACCD. Create a SINGLE LEFT OUTER JOIN to SPRIDEN\_CURRENT\_ASU\_V with TBRACCD\_PIDM and SPRIDEN\_PIDM.

Add SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME to the report.

Right click on SUM in the query panel and select Print.

Drag TBRACCD\_TERM\_CODE, TBRACCD\_DESC, TBRACCD\_AMOUNT to the query panel under Print.

SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	TBRACCD_TERM_CODE	TBRACCD_DESC	TBRACCD_AMOUNT
Andersen	Aaron	200740	Prepayment- Tuition/Housing	200.00
Anderson	Elizabeth	200740	Prepayment- Tuition/Housing	200.00
Andrews	George	200740	Prepayment- Tuition/Housing	200.00
Behrens	Christian	200740	Prepayment- Tuition/Housing	200.00
Bowman	Daniel	200740	Prepayment- Tuition/Housing	200.00
Brooks	Gena	200740	Prepayment- Tuition/Housing	200.00
Chang	Quoc	200740	Prepayment- Tuition/Housing	200.00
Cirulis	Andrew	201310	Textbooks Not Returned	13.61
Conard	Casey	200740	Prepayment- Tuition/Housing	200.00
Deal	Amanda	200740	Prepayment- Tuition/Housing	200.00
Dixon	Adam	201310	Textbooks Not Returned	16.81
Elliott	Thomas	200740	Prepayment- Tuition/Housing	200.00
Forrester	Amy	201310	Textbooks Not Returned	161.19
Griffin	Jonathan	200740	Prepayment- Tuition/Housing	200.00
Grzesik	Sarah	200740	Prepayment- Tuition/Housing	200.00
Guernier	Jeffrey	200740	Prepayment- Tuition/Housing	200.00
Haney	Joseph	200740	Prepayment- Tuition/Housing	200.00
Harriger	Lane	200740	Prepayment- Tuition/Housing	200.00
Harris	Holly	200740	Prepayment- Tuition/Housing	200.00
	Kathryn	200740	Prepayment- Tuition/Housing	200.00

Drag TBRACCD\_DETAIL\_CODE into the filter window and create the following—TBRACCD\_DETAIL\_CODE equal to 9925.

Drag TBRACCD\_DESC into the filter windows and create the following—TBRACCD\_DESC Like Character Mask EFOD%

The screenshot shows the Microsoft Power BI Interactive Design View interface. The top ribbon has tabs: Home, Insert, Format, Data, Slicers, Layout, View, and Field (which is selected). Below the ribbon are various icons for filtering, sorting, and styling. On the left, there's a Data pane listing columns: TBRACCD\_USER, TBRACCD\_ENTRY\_DATE, TBRACCD\_EFFECTIVE\_DATE, TBRACCD\_BILL\_DATE, TBRACCD\_DUE\_DATE, TBRACCD\_DESC, TBRACCD\_CROSSREF\_DETAIL\_CD, and TBRACCD\_SRCE\_CODE. A Filter pane contains two checked filters: "TBRACCD\_DETAIL\_CODE Equal to 9925" and "TBRACCD\_DESC Like character mask EFOD%". A Query pane shows options for Print (TBRACCD\_TERM\_CODE, TBRACCD\_DESC, TBRACCD\_AMOUNT) and By (SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME). The main area is titled "Interactive Design View" and displays a table with the following data:

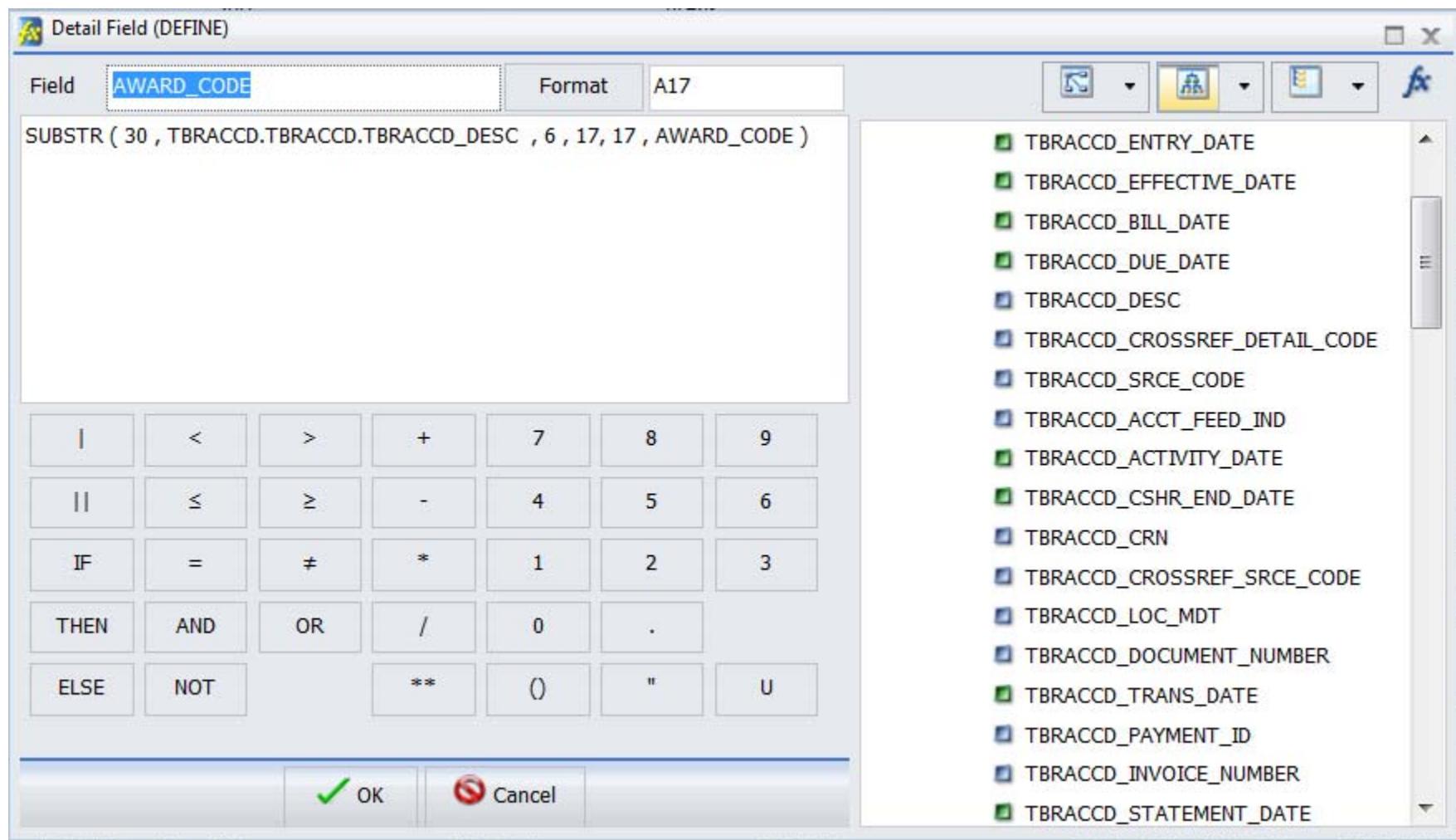
SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	TBRACCD_TERM_CODE	TBRACCD_DESC	TBRACCD_AMOUNT
Abee	Sam	200730	EFOD-SPACE GRANT	800.00
Aguero	Erica	200740	EFOD-GOLDEN LEAF	1500.00
Avery	Felicia	200740	EFOD-GOLDEN LEAF	1500.00
Beckner	James	200740	EFOD-NCSSM	1111.00
Biderman	Rachel	200740	EFOD-GOLDEN LEAF	1500.00
Bost	Alisha	200740	EFOD-NCSSM	1111.00
Bouchard	Matthew	200740	EFOD-AmeriCorps	1000.00
Byrd	Ashley	200740	EFOD-GOLDEN LEAF	1500.00
Caldwell	Sabrina	200740	EFOD-GOLDEN LEAF	1500.00
Cooper	Matthew	200740	EFOD-AmeriCorps	1000.00
Cresawn	Charles	200740	EFOD-GOLDEN LEAF	1500.00
DUE Funds On Deposit	.	200740	EFOD-PTSL	-239750.00
		200740	EFOD-GOLDEN LEAF	-30000.00
		200720	EFOD	-465.13
		200720	EFOD	-1500.00
Flora	Christopher	200730	EFOD-SPACE GRANT	800.00
Harrold	Kimberly	200740	EFOD-GOLDEN LEAF	1500.00
Hatcher	Heidi	200740	EFOD-NCSSM	1111.00
Hayes	Daniel	200740	EFOD-GOLDEN LEAF	1500.00
Honia	Sandi	200740	EFOD-GOLDEN LEAF	1500.00

Create DEFINE Field called AWARD\_CODE. Field—AWARD\_CODE Format A17 Click to get your cursor in the expression box, click the Functions button and expand Character and scroll down to SUBSTR and click to get the statement in the expression box.

Replace stringlength with 30, Replace String with TBRACCD\_DESC, replace Start with 6, replace End with 17, replace sublength with 17, and replace outfiled with AWARD\_CODE.

This is what your statement should look like.

SUBSTR ( 30 , TBRACCD.TBRACCD.TBRACCD\_DESC , 6 , 17, 17, AWARD\_CODE ) Click OK.



Add AWARD\_CODE between TBRACCD\_DESC and TBRACCD\_AMOUNT in your report. Click the IA icon and save your report as yourname83.

Run the report. Close the output and exit until you are back at your folder.

The screenshot shows the Microsoft Power BI Interactive Design View interface. The top ribbon has tabs: Home, Insert, Format, Data, Slicers, Layout, View, and Field (which is selected). Below the ribbon are several icons for filtering, sorting, and styling. On the left, there's a navigation pane with sections for Data, Filter, and Query. The Data section shows fields like SPRIDEN\_LAST\_NAME, SPRIDEN\_FIRST\_NAME, TBRACCD\_TERM\_CODE, TBRACCD\_DESC, AWARD\_CODE, TBRACCD\_AMOUNT, and TBRACCD\_BALANCE. The Filter section contains two active filters: "TBRACCD\_DETAIL\_CODE Equal to 9925" and "TBRACCD\_DESC Like character mask EFOD%". The Query section shows options for Print, AWARD\_CODE, TBRACCD\_AMOUNT, and By SPRIDEN LAST NAME. The main area displays a table titled "Interactive Design View" with the following data:

SPRIDEN_LAST_NAME	SPRIDEN_FIRST_NAME	TBRACCD_TERM_CODE	TBRACCD_DESC	AWARD_CODE	TBRACCD_AMOUNT
Abee	Sam	200730	EFOD-SPACE GRANT	SPACE GRANT	800.00
Aguero	Erica	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
Avery	Felicia	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
Beckner	James	200740	EFOD-NCSSM	NCSSM	1111.00
Biderman	Rachel	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
Bost	Alisha	200740	EFOD-NCSSM	NCSSM	1111.00
Bouchard	Matthew	200740	EFOD-AmeriCorps	AmeriCorps	1000.00
Byrd	Ashley	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
Caldwell	Sabrina	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
Cooper	Matthew	200740	EFOD-AmeriCorps	AmeriCorps	1000.00
Cresawn	Charles	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
DUE Funds On Deposit	.	200740	EFOD-PTSL	PTSL	-239750.00
		200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	-30000.00
		200720	EFOD		-465.13
		200720	EFOD		-1500.00
Flora	Christopher	200730	EFOD-SPACE GRANT	SPACE GRANT	800.00
Harrold	Kimberly	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00
Hatcher	Heidi	200740	EFOD-NCSSM	NCSSM	1111.00
Haves	Daniel	200740	EFOD-GOLDEN LEAF	GOLDEN LEAF	1500.00

## Exercise 8.4

### HGETC

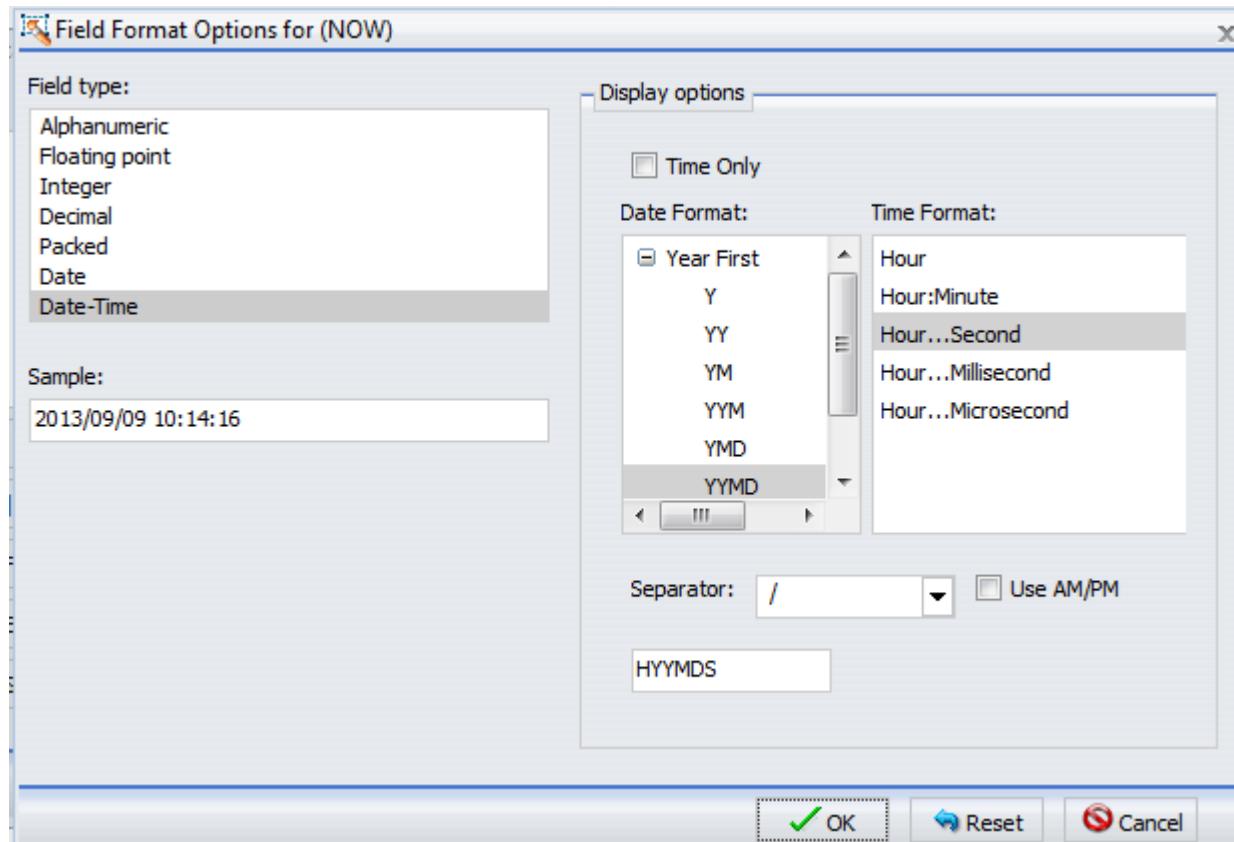
Right Click on yourname41 and select Copy. Right click on yourfolder and select paster. Right click on yourname41 (Copy 1) and select Properties.

Change the name to yourname84 and click OK. Open yourname84. Add saradap\_appl\_date after saradap\_admt\_code to the report.

Remove the saradap\_term\_code\_entry equal to 201110 by right clicking on the field in the filter box and selecting Delete.

Create a new defined field by clicking on the Data tab and selecting define.

Name the new field NOW click the Format button to pick a format . Notice the field type is Date-time. Expand Year First in the Date Format box and click YYMD. In the time Format box click Hour...Second. Leave the Separator /. Notice the sample format in the sample window. Also notice the format below the separator. Click OK. You are returned to your define field NOW. Click in the expression box and select the function button.



Expand Date and time, then scroll down and click HGETC.

Replace outlength with 8. Replace DTformat with NOW

Click OK.

Add NOW to the report after saradap\_appl\_date. Notice both fields are the same format.

Click on the Slicers tab and make sure Runtime is set to 500. Run the report. Close the report output exit and save your report.

You should be back at your folder.

The image displays two 'Detail Field (DEFINE)' dialog boxes side-by-side. Both dialogs have a title bar, a toolbar with icons for Save, Undo, Redo, and Cancel, and tabs for Field, Format, and HYYMDS.

**Left Dialog (Field: NOW):**

- Field: NOW
- Format: HYYMDS
- Buttons: |, <, >, +, 7, 8, 9, ||, ≤, ≥, -, 4, 5, 6, IF, =, ≠, \*, 1, 2, 3, THEN, AND, OR, /, 0, ., ELSE, NOT, \*\*, 0, \*, U.
- OK and Cancel buttons.

**Right Dialog (Field: HGETC(8, NOW)):**

- Field: HGETC(8, NOW)
- Format: HYYMDS
- Buttons: |, <, >, +, 7, 8, 9, ||, ≤, ≥, -, 4, 5, 6, IF, =, ≠, \*, 1, 2, 3, THEN, AND, OR, /, 0, ., ELSE, NOT, \*\*, 0, \*, U.
- OK and Cancel buttons.

**Available Functions (Listed on the right side of both dialogs):**

- DTDMY (days , outfield)
- DTDYM (days , outfield)
- DTMDY (days , outfield)
- DTMYD (days , outfield)
- DTYDM (days , outfield)
- DTYMD (days , outfield)
- GREGDT (infield , outfield)
- HADD(DTinfield, 'component', increment)
- HCNVRT (DTinfield, '(DTformat)', outlength)
- HDATE(DTinfield, 'YMD')
- HDIFF (DTfield1, DTfield2, 'component')
- HDTTM(DTinfield, outlength, 'DTformat')
- HGETC(outlength, 'DTformat')
- HINPUT(inlength, infield, outlength, 'DTformat')
- HMDINT(DTinfield, length, 'DTformat')
- HNAME(DTinfield, 'component', 'outfield')
- HPART(DTinfield, 'component', 'outfield')
- HSEPTT(DTinfield, 'component', infield, outlength)
- SARADAP\_INTV\_CODE
- SARADAP\_FEE\_IND
- SARADAP\_FEE\_DATE
- SARADAP\_ACTIVITY\_DATE
- SARADAP\_RATE\_CODE
- SARADAP\_EGOL\_CODE
- SARADAP\_EDLV\_CODE
- SARADAP\_MAJR\_CODE\_CONC\_1
- SARADAP\_DEPT\_CODE
- SARADAP\_SBGI\_CODE
- SARADAP\_RECR\_CODE
- SARADAP\_RTYP\_CODE
- SARADAP\_DEPT\_CODE\_2
- SARADAP\_MAJR\_CODE\_CONC\_2
- SARADAP\_PROGRAM\_1
- SARADAP\_TERM\_CODE\_CTLG\_1
- SARADAP\_MAJR\_CODE\_1\_2
- SARADAP\_DEPT\_CODE\_1\_2

## Exercise 9.1

### Excel Outputs

Create a new report using ASU\_ACADEMIC\_OUTCOME. Add College\_desc to the report. Drag and drop person\_uid under SUM in the query window. Right click on SUM and change it to Count.

Drag graduated\_ind to the filter area and create a filter graduated\_ind equal to Y

Drag Academic\_period\_graduation to the filters and create a filter academic\_period\_graduation equal to 201210.

Click on the Format tab and select Excel 2000. Run the report. Click the down arrow next to excel and pick a different excel format and run the report. Save the report as yourname91 and exit.

The screenshot shows the InfoBuilder Interactive Design View interface. The top menu bar includes Home, Insert, Format (selected), Data, Slicers, Layout, View, and Field. The toolbar below has icons for HTML, Active Report, Active Flash, PDF, Active PDF, Excel 2000 (selected), PowerPoint, InfoMini, Chart, Table (selected), Table of Contents, Freeze, Pages On Demand, Auto Drill & Analysis, and Features. The main workspace is divided into sections: Data, Interactive Design View, and Query. The Data section shows a tree view with items like SECOND\_MAJOR\_CONC\_3\_DESC, FIRST\_MINOR, FIRST\_MINOR\_DESC, SECOND\_MINOR, SECOND\_MINOR\_DESC, ACADEMIC\_YEAR\_GRADUATION, ACADEMIC\_YEAR\_GRADUATION\_DE, and ACADEMIC\_PERIOD\_GRADUATION. The Interactive Design View section displays a table titled 'PERSON\_UID' with columns 'COLLEGE\_DESC' and 'COUNT'. The data in the table is:

COLLEGE_DESC	COUNT
College of Arts & Sciences	9
College of Business	2
College of Education	5
College of Fine & Applied Arts	12
College of Health Sciences	8
Graduate School	13
University College	1

The Query section shows the following SQL-like query structure:

```
Σ Count
  □ PERSON_UID
  □ By
    □ COLLEGE_DESC
  □ Across
```

## Exercise 9.2

### Styling, Heading and Footing

Copy yourname72 and rename yourname72 (Copy 1) to yourname92. Open yourname92. Remove sub\_gpa, quality\_points, and credits\_for\_gpa from the report.

Move Full\_crse\_name under SUM in the Query area and right click on SUM and select Print.

Drag College\_desc to the first position after BY in the query area.

Delete credits\_for\_gpa from the filter area.

Drag Academic\_period to the filter area and create a simple parameter Academic\_period equal to Prompt.

Change the sort on College\_desc by right click on college\_desc and select sort, then click sort descending.

The screenshot shows the Microsoft Analysis Services (SSAS) Data Tools interface. The top ribbon has tabs for Home, Insert, Format, Data, Slicers, Layout, View, and a dropdown for Field - COLLEGE\_DESC. The main area is titled "Interactive Design View". On the left, there's a "Data" pane showing the ASU\_STUDENT\_COURSE dimension with various attributes like ID, NAME, ACADEMIC\_YEAR, etc., and a "Filter" section with a checked filter for ACADEMIC\_PERIOD Equal to Prompt. Below that is a "Query" pane with sections for Print, By, and Across, where "By" is selected and shows the query structure: Print, FULL\_CRSE\_NAME, By, COLLEGE\_DESC, NAME, ID, and Across. The central grid displays student data grouped by college. The header row includes columns for COLLEGE\_DESC, NAME, ID, and FULL\_CRSE\_NAME. The data rows show students from University College, School of Music, College of Health Sciences, College of Fine & Applied Arts, College of Education, College of Business, and College of Arts & Sciences. The "Format" ribbon tab is currently selected, showing various styling options like Data Style, Title Style, and Data + Title.

COLLEGE_DESC	NAME	ID	FULL_CRSE_NAME
University College	Johnson, Laurie A.	900451835	UCO 1200-157
School of Music	Eaton, Travis R.	900474919	MUS 2011-107
College of Health Sciences	Tate, Cynthia E.	900232062	MUS 5061-101
College of Fine & Applied Arts	Bovd, Natalie M.	900426868	H P 3200-101
College of Education	Hopkins, Bethany L.	900473429	NUT 3205-101
College of Business	Schaffer, Anna E.	900392291	NUR 3102-100
College of Arts & Sciences	Allen, Kenneth D.	900382651	IND 1001-101
	Robson, Tony	900404418	P E 1071-171
	Jackson, Dylan B.	900501887	LSA 5030-377
	McAdam, Holly M.	900396617	C D 3364-101
	Allen, Justin G.	900399297	CIS 2025-102
	Chiriboga, Fernando A.	900435942	ECO 2030-105
	Clanton, Julian C.	900241301	MKT 3220-101
	Furr, Stephen P.	900447768	POM 3650-103
	Henderson, Ryan A.	900417753	MKT 3050-350
	Meadows, Scott T.	900395940	ACC 2110-110
	Morgan, Ellen E.	900430846	CIS 2050-101
	Nicholson, Robert C.	900419831	ACC 3200-101
	Norman, Lori M.	900454583	MKT 3260-102
	Rutten, Ryan M.	900445936	MKT 3050-101
	Ashby, Laura J.	900394999	ANT 2215-101
	Beveridge, Andrew R.	900497465	PHL 2015-105
	Canra, Adam T.	900477162	PSY 1200-114

Click on College\_desc in the interactive design view area. Notice the tab FILED—COLLEGE\_DESC is highlighted.

We want to have each College on a separate page. Click the Page Break button.

Click the Home tab. Click the down arrow next to Header & Footer button and select Page Header.

Type Courses For a Person By College.

Change the font size to 14. Click OK. Notice the change in the interactive Design View.

Since you have a page break on each college you will now have a title on each page.

We want to change the FONT for the whole report.

The screenshot shows the SAP BusinessObjects Interactive Design View interface. The top menu bar includes Home, Insert, Format, Data, Slicers, Layout, View, and Field - COLLEGE\_DESC. The ribbon tabs are Format, Design, Filter, and Report. The left sidebar contains sections for Data (ASU\_STUDENT\_COURSE dimensions like ID, NAME, ACADEMIC\_YEAR, etc.), Filter (ACADEMIC\_PERIOD Equal to Prompt), and Query (Print, By, Across). Three reports are displayed in the main area:

- Courses For A Person By College** (School of Music):

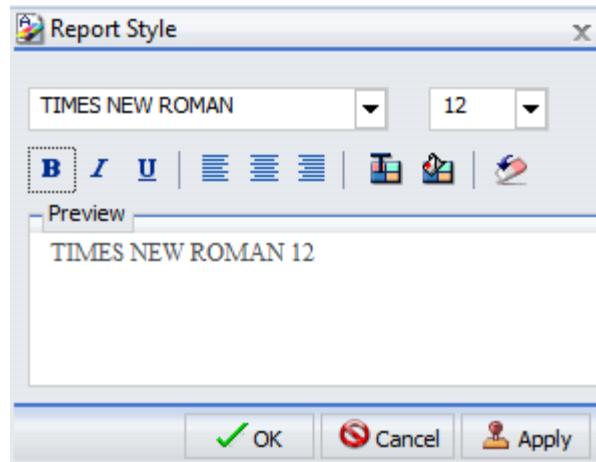
COLLEGE_DESC	NAME	ID	FULL_CRSE_NAME
School of Music	Silva, Monica T.	900330184	AMU 2437-121
- Courses For A Person By College** (College of Fine & Applied Arts):

COLLEGE DESC	NAME	ID	FULL CRSE NAME
College of Fine & Applied Arts	Ames, Timothy B.	900324944	THR 2108-101
	Flood, Matthew E.	900361982	FCS 2103-102
	Holloway, Gary E.	900330537	MSL 3001-201
	Megargee, Meghan E.	900361724	FCS 2104-201
	Patterson, Kirsten A.	900330366	E S 3550-201
	Sughrue, Christina R.	900199032	FCS 4701-201
- Courses For A Person By College** (College of Education):

COLLEGE_DESC	NAME	ID	FULL_CRSE_NAME
College of Education	Birch, Adam H.	900361978	B E 3340-101

Click on the HOME tab again. Click the Style Button. Change the Font to Times New Roman. Change the Font Size to 12.

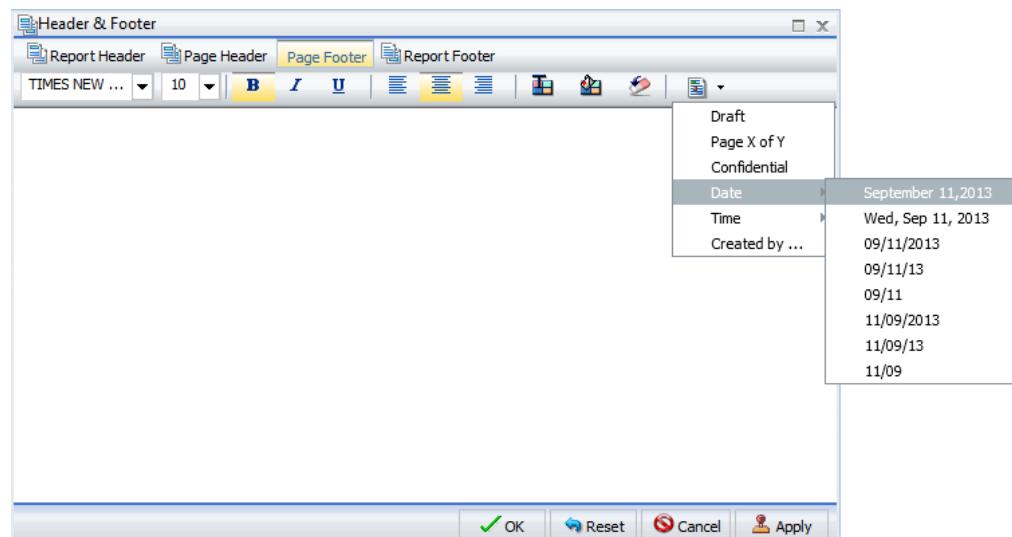
Click Bold button to turn off Bold. Click OK.



Click the Header & Footer button again. This time select Page Footer. Remove the Enter text here from the text window.

Click the Preformatted text button, scroll down to Date and Select the Date with the month full name. Click OK.

Run and save your report. Exit to get back to your folder. Since we have the output set to just 500 records you probably won't see a different College per page.



### Exercise 9.3

#### Rank, Line Breaks, Pop-up Titles

Create a new report using ASU\_ACADEMIC\_STUDY\_CURRENT.

Add College\_desc to the report as a BY field. Add Person\_uid to the report as a sum field, right click on Person\_uid and scroll to More, select Aggregation Functions then select Count Distinct.

The screenshot shows a report interface with two columns: COLLEGE\_DESC and PERSON\_UID. The COLLEGE\_DESC column contains three items: College of Fine & Applied Arts, Graduate School, and University College. The PERSON\_UID column contains three numerical values: 51, 1, and 150. A context menu is open over the cell containing the value 150 in the PERSON\_UID column. The menu options are: Filter Values..., Sort, Visibility, Change Title..., Edit Format, More, Data Bars, Aggregation Functions (which is currently selected), and Delete. The Aggregation Functions submenu is expanded, showing various options: (None), Sum, Average, Count, Count Distinct (which is highlighted with a grey background), Percent of Count, Distinct Values, First Value, Last Value, Maximum, Minimum, Total, Percent, Row Percent, and Average Square.

Right click on College\_desc and select Change Title—change the title to College.

Right click on Count Distinct PERSON\_UID and select Change Title—Change the title to Number of Students Enrolled.

Click the Format tab and click the Title Popup button.

The screenshot shows the Interactive Design View interface. On the left, there is a sidebar titled "Data" containing a tree view of fields: SGBSTDN\_STYP\_CODE, Measures/Properties (PERSON\_UID, TOTAL\_CREDITS, AGE ADMITTED, PRIMARY ADVISOR PER, ADVISOR COUNT, STUDENT FTE), and a collapsed section. In the center, there is a table titled "Interactive Design View" with two columns: "College" and "Number of Students Enrolled". The table contains four rows: College of Fine & Applied Arts (1), Graduate School (1), School of Music (1), and University College (2). At the top, there is a toolbar with various output types (HTML, Active Report, Active Flash, PDF, Active PDF, Excel 2000, PowerPoint, InfoMini, Chart, Report, Navigation, Title Popup, Accordion, Repeat Sort Value, Stack Measures) and destination options (Output Types, Destination, Features).

College	Number of Students Enrolled
College of Fine & Applied Arts	1
Graduate School	1
School of Music	1
University College	2

Drag Academic\_period to the Filter area and create a simple prompt. ACADEMIC\_PERIOD equal to Prompt

Drag enrolled\_ind to the Filter area and create ENROLLED\_IND equal to Y

Highlight College in the report, Click on Tab Field COLLEGE\_DESC and click the Line Break button.

The screenshot shows the SAP Crystal Reports Interactive Design View interface. The top menu bar includes Home, Insert, Format, Data, Slicers, Layout, View, and Run. The ribbon tabs are Filter, Sort, Break, Style, and Format. The Filter tab is selected, showing fields like PRIMARY\_ADVISOR\_NAME\_LFMI, STUDENT\_CLASSIFICATION\_BOAP, STUDENT\_CLASS\_BOAP\_DESC, STUDENT\_CLASSIFICATION, STUDENT\_CLASSIFICATION\_DESC, GRADUATED\_IND, ENROLLED\_IND, and REGISTERED\_IND. The Filter pane shows two selected filters: ACADEMIC\_PERIOD Equal to Prompt and ENROLLED\_IND Equal to Y. The Query pane shows a Sum operation on CNT.DST.PERSON\_UID and a By operation on COLLEGE\_DESC, DEPARTMENT\_DESC, and Across. The main preview area displays a table with columns: College, Department, and Number of Students Enrolled. The toolbar at the top right includes icons for Filter, Exclude, Include, Prompt, Sort (Up/Down), Rank, Limit (No Limit), Page Break, Sub Header, Line Break (highlighted in yellow), Sub Footer, Subtotal, Recompute, Data Style, Title Style, Data + Title, Specific, Visibility, and Links. The style section shows font (Trebuchet MS), size (9), and bold/italic/underline options.

Next we will RANK the enrolled by college. Right Click on College in the Interactive Design View window.

Select Sort, then Rank, then click On.

You will notice that RANK is placed in the report before College.

Save the report as yourname93. Run the Report. Close the output Window. Exit back to your folder.

Interactive Design View

College	Number of Students Enrolled
College of Fine & Applied Arts	1
Graduate School	1
Scho	1
Unive	2

Context menu for the first row (College of Fine & Applied Arts):

- Sort
- Break
- Visibility
- Change Title...
- More
- Delete

Sub-menu for "Sort":

- Sort
- Rank
- On
- Off

Interactive Design View

RANK	College	Number of Students Enrolled
1	College of Arts & Sciences	103
2	College of Business	46
3	College of Education	23
4	College of Fine & Applied Arts	64
5	College of Health Sciences	49
6	Graduate School	51
7	No College Designated	16
8	School of Music	3
9	University College	141

## Exercise 9.4

### Table of Contents, freezing columns, page on demand

Make a copy of yourname93 and name it yourname94. Open yourname94. Remove the RANK column from the report. Add Department\_desc after College as a By field. Change the Title to Department

Click the Format Tab and select the Table of Contents Button. Run the report. A table of contents icon is displayed in the top-left corner of the report output. Double click the icon to display the Table of Contents pop-up menu. Click on a value in the Table of Contents. You can move the Table of Contents by clicking on the title bar then double clicking in the white space in the report. Close the report output.

College	Department	Number of Students Enrolled
College of Arts & Sciences	Anthropology	52
	Biology	168
	Chemistry	53
	Computer Science	40
	Economics	11
	English	108
	Environmental Science	11
	Geography and Planning	33
	Geology	24
	Government and Justice Studies	254
	History	107
	Interdisciplinary Studies	1
	Languages, Literature, Culture	24
	Mathematical Sciences	37
	Philosophy and Religion	13
	Physics and Astronomy	16
	Psychology	236
	Sociology	61

Table of Contents

- College of Arts & Sciences
- College of Business
  - Accounting
  - Business
  - Computer and Informat
  - Economics
  - Finance Banking and Ir
  - Management
  - Marketing
- College of Education
- College of Fine & Applied /
- College of Health Science
- Graduate School
- No College Designated
- School of Music
- University College
- View Entire Report (On/Off)

Back at the interactive design view in InfoAssist click the Format tab and click the Freeze Button.

Run the report again and notice the scroll bar available in the report .. Scroll and you will see the frozen column headings.

Close the output and return to the Interactive Design View.

The screenshot shows the InfoAssist software interface with the following details:

- Top Bar:** Home, Insert, **Format**, Data, Slicers, Layout, View, Field.
- Toolbar:** HTML, Active Report, Active Flash, PDF, Active PDF, Excel 2000, PowerPoint, InfoMini, Chart, Report, Table, Table of Contents, **Freeze**, Pages On Demand, Auto Drill & Analysis, Title Popup, Accordion, Repeat Sort Value, Stack Measures.
- Left Sidebar:** Data panel showing fields: START\_DATE\_MATRICUL, MATRICULATED\_IND, OUTCOME\_AWARDED\_IN, ADMISSIONS\_POPULATION, DEPARTMENT, DEPARTMENT\_DESC, FIRST CONCENTRATION. A Filter button is also present.
- Top Table (Frozen Headers):** Shows data for College and Department with the heading "Number of Students Enrolled".

College	DEPARTMENT_DESC	Number of Students Enrolled
College of Health Sciences	Health Leisure Exercise Sci	1
	Social Work	1
University College	Biology	2
	Curriculum and Instruction	1
- Bottom Table (Scrollable):** Shows data for College and Department with the heading "Number of Students Enrolled".

College	DEPARTMENT_DESC	Number of Students Enrolled
College of Arts & Sciences	Anthropology	142
	Biology	507
	Chemistry	179
	Computer Science	156
	Cultural, Gender & Global Stu	6
	Economics	19
	English	327
	Environmental Science	43
	Fermentation Sciences Program	3
	Geography and Planning	82
	Geology	82
	Government and Justice Studies	634
	History	324
	Interdisciplinary Studies	2
	Languages, Literature, Culture	84
	Mathematical Sciences	166
	Philosophy and Religion	68
	Physics and Astronomy	64
	Psychology	732

Back at the Interactive Design View in InfoAssist. Click the Format Tab and Select Pages on Demand.

Run your report again. Notice the bottom of the output window. Explore the options available with Pages on Demand. Close the output.

Save the report and exit.

The screenshot shows the InfoAssist software interface in 'Interactive Design View'. The top menu bar includes 'Home', 'Insert', 'Format' (which is selected), 'Data', 'Slicers', 'Layout', 'View', and 'Field'. The ribbon below has sections for 'Output Types' (HTML, Active Report, Active Flash, PDF, Active PDF, Excel 2000, PowerPoint, InfoMini, Report), 'Destination' (Table, Table of Contents, Freeze, Pages On Demand), 'Navigation' (Auto Drill & Analysis, Title Popup, Accordion, Repeat Sort Value), and 'Features' (Stack Measures). On the left, a 'Data' pane lists fields: START\_DATE\_MATRICUL, MATRICULATED\_IND, OUTCOME\_AWARDED\_IND, ADMISSIONS\_POPULATION, DEPARTMENT, DEPARTMENT\_DESC, and FIRST\_CONCENTRATION. The main area displays two tables. The first table shows student enrollment by college and department:

College	DEPARTMENT_DESC	Number of Students Enrolled
College of Fine & Applied Arts	Technology & Environ Design	1
Graduate School	Government and Justice Studies	1
University College	Economics	1
	Government and Justice Studies	1
	Nursing	1

The second, larger table provides a detailed breakdown of student enrollment across various colleges and departments:

College	DEPARTMENT_DESC	Number of Students Enrolled
College of Arts & Sciences	Anthropology	142
	Biology	507
	Chemistry	179
	Computer Science	156
	Cultural, Gender & Global Stu	6
	Economics	19
	English	327
	Environmental Science	43
	Fermentation Sciences Program	3
	Geography and Planning	82
	Geology	82
	Government and Justice Studies	634
	History	324
	Interdisciplinary Studies	2
	Languages, Literature, Culture	84
	Mathematical Sciences	166
	Philosophy and Religion	68
	Physics and Astronomy	64
	Psychology	732
	Social Work	1
	Sociology	114
College of Business	Accounting	301
	Business	115
	Computer and Information Syst	136
	Economics	75
	Finance Banking and Insurance	231
	Management	579
	Marketing	289
College of Education	Curriculum and Instruction	824
	Family and Consumer Sciences	221
	Reading Edu and Special Educ	124

At the bottom, a navigation bar shows 'Page 1 of 3' and various control icons.

## Exercise 10.1

### Create an INFO MINI Application

Copy yourname72 and paste. Name yourname72 (copy 1) to yourname101.

Open yourname101. Remove Quality\_points, Credits\_for\_gpa, and Sub\_gpa from the report. Move college\_desc to the top of the BY subgroup in the query area. Grab and move full\_crse\_name and drop it under Sum in the query area. Right click on Sum and change it to Print.

Click the Format Tab . Select the down arrow next to InfoMini and Click on Slicer Tab to get a check next to it, click on Data Tab to get a check next to it , click on Home tab to get a check next to it. Click Resources/Field to get a check next to it.

Remove Credits\_for\_gpa not equal to 0 from the filter area. Drag Academic\_period to the filter area and create the filter

Academic\_period equal to Prompt

Go to the Slicers tab and select 500 for Run Time. Run the report.

The screenshot shows the INFO MINI application interface. The ribbon tabs include Home, Insert, Format, Data, Slicers, Layout, View, and Field. The Format tab is selected. The Data tab is open, showing the ASU\_STUDENT\_COURSE table with dimensions ID, NAME, ACADEMIC\_YEAR, ACADEMIC\_YEAR\_DESC, ACADEMIC\_PERIOD, and ACADEMIC\_PERIOD\_DESC. A filter for CREDITS\_FOR\_GPA Not equal to 0 is applied. The Interactive Design pane shows a Slicer Tab (Edit) with COLLEGE\_DESC selected. The Query pane shows a Print section with FULL\_CRSE\_NAME, and a By section with COLLEGE\_DESC, NAME, ID, and Across. The main area displays a table of student course data:

ID	FULL_CRSE_NAME
900227624	ART 1011-107
900226285	C I 2800-110
900224499	COM 3305-103
900224387	CMA 1100-111
900373396	HED 3500-101
900228097	P R 2020-105
900227837	FDN 3100-103
900373109	C I 2800-110
900298486	STT 3820-101
900373486	U S 1150-105
900298495	P E 3001-101
900301666	PSY 2301-101
900229690	R M 4110-101
900300932	H P 1105-107
900227724	ACC 3100-102
900301479	ART 1002-102
900226890	BUS 1050-112
900301939	P S 1100-101
900298890	ART 3530-101
900227131	HIS 4100-102
900013291	FCS 2301-101
900226084	TEC 1022-104
900302098	ENG 2320-103
900302374	ART 1003-101
900227431	P R 3010-101

After the report finishes running notice what is available to the user. Click on the Edit tab. Now the user can add more fields, change the filters, Remove fields. Check each available tab . Close the output. Save and Exit your report.

The screenshot shows the QlikView application window with the 'Edit' tab selected in the top navigation bar. The interface includes a toolbar with icons for Save, Run, Interactive, and Edit. Below the toolbar, there are tabs for Home, Format, Data, Slicers, and Field, with 'Slicers' currently active. A 'Run Time' dropdown set to 500 is also visible.

A central area displays a data grid titled 'Group 1' with columns: COLLEGE\_DESC, NAME, ID, and FULL\_CRSE\_NAME. The data consists of 20 rows of student information. To the left of the grid is a 'Data' pane containing a tree view of dimensions and a 'Filter' pane showing a selected filter for 'ACADEMIC\_PERIOD Equal to 201230'. At the bottom left is a 'Query' pane with options for Print, By, and Across.

COLLEGE_DESC	NAME	ID	FULL_CRSE_NAME
College of Arts & Sciences	Abernathy, Eric	900482381	SNH 5530-101 SNH 5027-101
	Absher, Alanna K.	900458059	MAT 1020-101
	Acey, Alexander	900482301	MAT 1025-102
	Adair, Devin C.	900381613	C J 3115-201 C J 3115-101
	Adams, Bryson M.	900474848	ANT 1415-101 HIS 3923-101
	Adams, Jamison M.	900448466	PSY 3100-102
	Adams, Meredith D.	900407793	ENG 2170-101
	Adkins, Matthew T.	900448456	GHY 1020-101
	Aebischer, Joshua P.	900426511	FRE 1060-101
	Agnew-Wieland, Samuel T.	900502106	AST 1002-1 SOC 1000-9 HIS 1130-6
			PSY 1200-10
			SNH 1010-11
			SNH 1020-12
			ENG ELEC-14
			ENG 2040-4
			P S 1100-8
			PHL ELEC-7
			ANT ELEC-2

## Exercise 11.1

### Build a Compound Report from an Existing Report.

Copy yourname72 and name the copy yourname111. Open yourname111. Change to Document on the Home tab. Remove Quality\_points, Credits\_for\_gpa, Full\_crse\_name, name and Sub\_gpa from the report. College\_desc should be the only field in the BY subgroup in the query area. Grab and move Id to the sum area in query. Right click on id and select more, aggregation functions, and select Count Distinct.

Remove Credits\_for\_gpa not equal to 0 from the filters. Drag Academic\_period to Filter and create the filter academic\_period equal to 201230.

Move and size the report area to resemble what is below by grabbing the lines around the report and sizing and moving.

The screenshot shows a reporting software interface with various toolbars and panels. The top toolbar includes buttons for Filter, Exclude, Prompt, Sort (Up), Sort (Down), Rank, Limit, Page Break, Sub Header, Line Break, Sub Footer, Style, Format, Specific, Visibility, and Links. The left side features a 'Data' panel listing fields like REGISTRATION\_ERROR\_FLAG, COURSE\_LEVEL, COURSE\_LEVEL\_DESC, COLLEGE, COLLEGE\_DESC, DEPARTMENT, DEPARTMENT\_DESC, and DIVISION. Below it is a 'Filter' panel containing a single filter: ACADEMIC\_PERIOD Equal to 201230. The bottom left has a 'Query' panel showing a query structure with a COUNT function on CNT.DST.ID, a BY clause for COLLEGE\_DESC, and an ACROSS clause. The main workspace is titled 'Document' and displays a table with the following data:

COLLEGE_DESC	COUNT DISTINCT ID
College of Arts & Sciences	13
College of Business	13
College of Education	7
College of Fine & Applied Arts	5
College of Health Sciences	5
School of Music	1
University College	2

Click the insert tab and click image. Select asubirdf.gif. Place the image above the report in the document. Size it by grabbing the lines around it and dragging.

The screenshot shows a reporting tool interface with the following components:

- Top Bar:** Home, Insert (selected), Format, Data, Slicers, Layout, View, Field.
- Insert Tab:** Report, Chart, Existing Report, Text Box, Image.
- Left Panel:** Data, ASU\_STUDENT\_COURSE (Dimensions: ID, NAME, ACADEMIC\_YEAR, ACADEMIC\_YEAR\_DESC, ACADEMIC\_PERIOD, ACADEMIC\_PERIOD\_DESC), Filter, Query.
- Document Area:** A document with a ruler at the top. An image of the Appalachian State University logo is placed in the center, surrounded by a dashed selection box.
- Table:** A table showing the count of distinct IDs for different college descriptions.

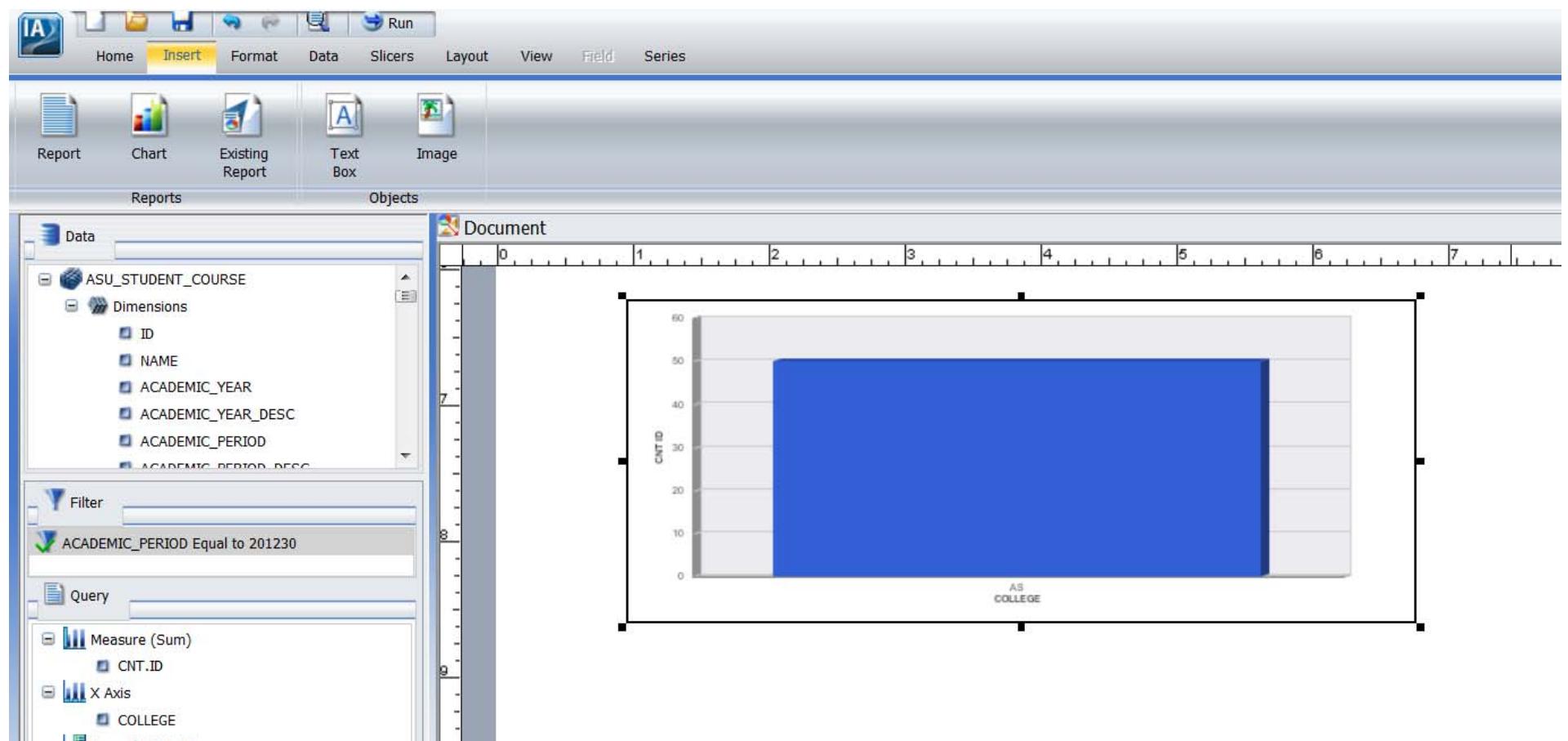
COLLEGE_DESC	COUNT DISTINCT ID
College of Arts & Sciences	12
College of Business	16
College of Education	5
College of Fine & Applied Arts	2

Next we are going to insert a graph of the report we are displaying. Click on the insert tab and click Chart. A chart is inserted in the document. You need to move it below the report. We are going to build the chart just like the report.

Drag college to the X Axis. Drag ID to Measure(Sum) . Notice ID should change to CNT.ID. Drag Academic\_period to Filter area and create Academic\_period equal to 201230.

Set run Time to 500 on the slicers tab and run the report. Exit and save your changes .

You should be back at your folder.



## Exercise 12.1

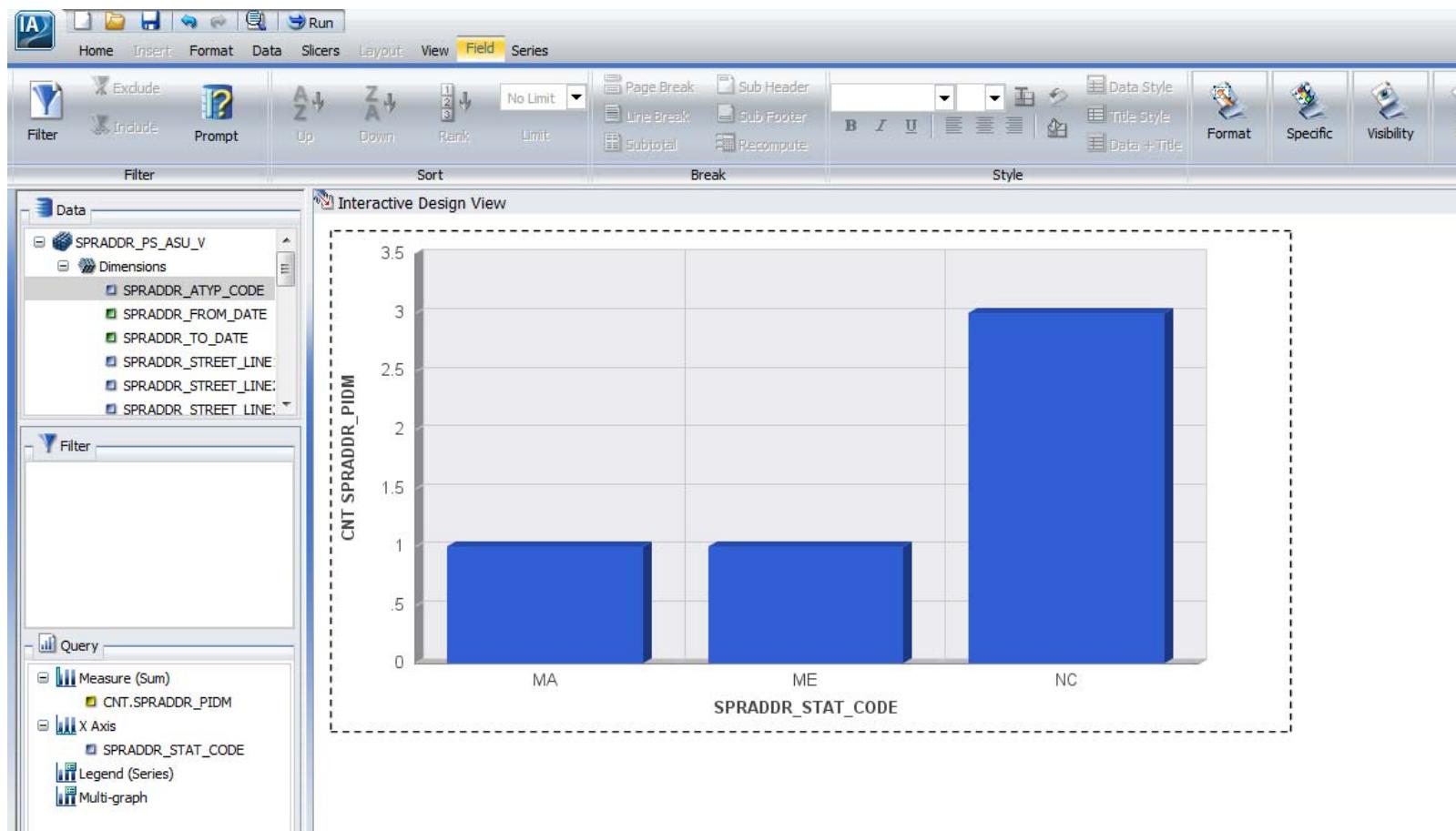
### Create a Chart in InfoAssist

Open InfoAssist. Select Build a Chart from the Splash Screen. Select spraddr\_ps\_asu\_v . This will be just a simple chart.

Drag Spraddr\_pidm to Measure(Sum) in the query area. Right click on Spraddr\_pidm, select more, aggregation functions, select count.

Drag Spraddr\_stat\_code to X Axis in the query area.

Notice the preview is a bar chart.



Click on the Format tab and go through the different charts available.

Change the title for CNT.SPRADDR\_PIDM by right clicking on the field in the query area and selecting Change Title— Student Count.

Change the title for SPRADDR\_STAT\_CODE by right clicking on the field in the query area and selecting Change Title—Student State .

Go to the Format tab and click the down arrow next to Grid Lines Button, Click 01 Major Gridlines to remove the Check mark.

Save the report. Run the report.

