Intermediate Developer Studio Training Exercises
Exercise 2.1
Generate a Parameter Tool

Open Developer Studio. Open the TEST environment. Find the CLASS domain. Locate the Intermediate class folder and create a folder with your name.

Inside your folder create a new procedure called yourname21. Select Report. Select ASU_STUDENT_COURSE_CURRENT as your data file. Click BY in the columns toolbar and select ACADMIC_PERIOD, COLLEGE_DESC, DEPARTMENT_DESC, FULL_COURSE_NAME.
Place your cursor after FULL_COURSE_NAME and add PERSON_UID. It should be highlighted now.

Click SUM in the columns toolbar, then select CNT.DST.

Click the WhereIf button in the columns toolbar. Click Assist and create a simple parameter for ACADEMIC_PERIOD. Click OK and Apply.

Click the Retrieval Limits tab and enter 1000 in the record limit box.

Click OK to return to the report painter window.

Run the report.
Select ACADEMIC_PERIOD and hold down the CTRL key, then select, COLLEGE_DESC, DEPARTMENT_DESC, and FULL_COURSE_NAME.

Click the Generate Parameter Group icon with one variable for each selected column selected. Notice the & connected to the fields now.

Run the report.

Notice the sort fields displayed on your parameter screen. Select your sort fields and enter an academic period.

Click run in a new window, then click Run.

Notice your output now only includes your selected sort fields and the count.

Close your output window and parameter window and return to the report painter.
Once again Select ACADEMIC_PERIOD, hold down the CTRL key and Select COLLEGE_DESC, DPARTMENT_DESC and FULL_COURSE_NAME. Click the Remove from Parameter Group button. Notice all the & are removed from the fields selected.

Once again select ACADEMIC_PERIOD, hold down the CTRL key and Select COLLEGE_DESC, DPARTMENT_DESC and FULL_COURSE_NAME. Select One variable for all selected columns from the drop down box for the Parameter tool then click the Generate Parameter button. Run the report again.
Notice the difference in the parameter screen now. Select some sort fields and enter an academic_period.

Click Run in a new window and Click Run. Notice the report now.

This would be a great way to provide the end user with different sorts to match their needs.

Close the output window, the parameter window and return to the report painter window. Close and Save your report. Return to your folder.
Exercise 2.2
Using FOC_NONE, -SET and -PROMPT

Click BY in the Columns toolbar and ADDSPRIDEN_ID, SPRIDEN_LAST_NAME, SPRIDEN_FIRST_NAME, SPRIDEN_MI to your report.
Click the JOIN icon and ADD SPRADDR_PS_ASU_V.
Create a Single Inner Join on the PIDM. Run to check for errors, save the join and return to the report painter.
Place your cursor after SPRIDEN_MI and add SPRADDR_STREET_LINE1, SPRADDR_STREET_LINE2, SPRADDR_CITY, SPRADDR_STAT_CODE, and SPRADDR_ZIP.
Click the WhereIf button in the columns toolbar, Click Assist.

Add SPRIDEN_ID in the column to filter, select Equals for the Logical Relation, select parameter for the Compare Type, for the Compare Value, Select Simple for the variable type and type in BANID for the name. Click Ok, Click OK.

Click NEW in the Where tab, click Assist.

Add SPRIDEN_LAST_NAME in the column to filter, Select is like for the Logical Relation, Select Parameter for the Compare Type, for the Compare Value select simple for the variable type and type in LNAME for the name Click OK, Click OK

You should now have two parameters in your Where tab that are separate parameters.
Click New in the Where tab again, click assist. Add SPRIDEN_FIRST_NAME to the Column to filter, select is like for the Logical Relation, select Parameter for the Compare type, for the Compare Value select simple for the variable type, type in FNAME for the Name. Click OK, Click OK.

Click New in the Where tab again, click assist. Add SPRADDR_STAT_CODE to the Column to filter, select equals for the Logical Relation, select Parameter for the Compare type, for the Compare Value select simple for the variable type, type in ST for the Name. Click OK, Click OK.

You should have separate parameters like below

Click the Retrieval Limits tab and enter 1000 in the Record Limit. Click OK. Save and close your report. You should be at the procedure viewer now.
Click the Text View tab at the bottom of the procedure viewer window. You will see the report text like below.

```
INNER SPRIDEN_CURRENT ASU_V.SPриден_CURRENT ASU_V.SPриден_PIDM IN
SPриден_CURRENT ASU_V TO UNIQUE SP食品药品 ASU_V.SP食品药品 ASU_V.SP食品药品_PIDM
IN SP食品药品 ASU_V TAG AS AS
END
TABLE FILE SPриден_CURRENT ASU_V
BY SP食品药品.ID
BY SP食品药品.LAST_NAME
BY SP食品药品.FIRST_NAME
BY SP食品药品.NT
BY SP食品药品.STRREET_LINE1
BY SP食品药品.STRREET_LINE2
BY SP食品药品.CITY
BY SP食品药品.STRREET_CODE
BY SP食品药品.ZIP
WHERE SP食品药品.ID EQ 'aRANID';
WHERE SP食品药品.LAST_NAME LIKE '%NAME';
WHERE SP食品药品.FIRST_NAME LIKE '%NAME';
WHERE SP食品药品.STRREET_CODE EQ 'aR';
WHERE RECORDLIMIT EQ 1000
ON TABLE SET PAGE-HIN NOTREAD
ON TABLE NORMAL
ON TABLE SET HOLE FORMAT HTML
ON TABLE SET HOLELOSS ON
ON TABLE SET STYLE *
  INCLUDE = model1,
  TYPE=REPORT,
  GRAPHCOLOR='GREEN',
```
Place your cursor in front of the JOIN at the beginning of the text and hit enter. You now have a blank line to begin entering text.

Type the following it is in Upper Case.

-PROMPT &BANNER_ID
-PROMPT &LAST_NAME
-PROMPT &FIRST_NAME
-PROMPT &STATE

The text should look like the following.

These statements solicit values before the variables to which they refer are used in the procedure.

The user is prompted for a value as soon as -PROMPT is encountered.
With your cursor below the last -prompt command. Hit enter.

Type the following. These statements set the parameters you entered in the report to be evaluated for a value or not.

-SET &BANID = IF '&BANNER_ID.EVAL' EQ "" THEN 'FOC_NONE' ELSE '&BANNER_ID.EVAL';
-SET &LNAME = IF '&LAST_NAME.EVAL' EQ "" THEN 'FOC_NONE' ELSE '&LAST_NAME.EVAL';
-SET &FNAME = IF '&FIRST_NAME.EVAL' EQ "" THEN 'FOC_NONE' ELSE '&FIRST_NAME.EVAL';
-SET &ST = IF '&STATE.EVAL' EQ "" THEN 'FOC_NONE' ELSE '&STATE.EVAL';
The only drawback to this is you will be unable to edit your report in the painter after adding these commands.

Save the report by clicking on the disk icon in the procedure view. Then Click the run icon.

Notice the parameter screen.

Enter a parameter or 2. Example Last_name like Smith State = KY

Click Run in a new window, click Run

Notice in the screen print below the report returned two people with last name of Smith that have a permanent address in Kentucky.

What if you only knew the first name and state?

Close the output, close the parameter screen. Close and save the report.
Exercise 3.1

Multiple Drill Downs

Create a new report called yourname31instructor, use ASU_STUDENT_COURSE_CURRENT as your data file.

Click BY in the columns toolbar, add ACADEMIC_PERIOD, FULL_COURSE_NAME, COURSE_SECTION_NUMBER to the report.

Create a defined field for INSTRUCTOR_FULL_NAME -

INSTRUCTOR_FULL_NAME/A50=INSTRUCTOR_FIRST_NAME || (' ' | INSTRUCTOR_MIDDLE_NAME) || ( ' ' | INSTRUCTOR_LAST_NAME);

Add INSTRUCTOR_FULL_NAME to your report after the COURSE_SECTION_NUMBER
Click WhereIf, Click Assist.

Add ACADEMIC_PERIOD as a simple parameter. Click OK.

Click New and Add FULL_COURSE_NAME as a simple parameter. Click OK. Return to your report.
Save the Report and Run it using the following Parameters. Or if you know a FULL_COURSE_NAME by all means use that.

FULL_COURSE_NAME = MKT 3050  ACADEMIC_PERIOD = 201210

Select Run in a new window, Click Run

Close the output and parameter windows. Close and save your report.
Create a new report called yourname31building using ASU_STUDENT_COURSE_CURRENT.

Add ACADEMIC_PERIOD, FULL_COURSE_NAME, COURSE_SECTION_NUMBER as BY fields.

Create a SINGLE INNER JOIN with ASU_MEETING_TIME. Joining on ACADEMIC_PERIOD and COURSE_REFERENCE_NUMBER

Add BUILDING_DESC, ROOM, BEGIN_TIME_AMPM, END_TIME_AMPM to the report.

Create a DEFINE FIELD called MEETINGDAYS

MEETINGDAYS/A10=MONDAY_IND || TUESDAY_IND || WEDNESDAY_IND || THURSDAY_IND || FRIDAY_IND || SATURDAY_IND || SUN-DAY_IND;

Add MEETINGDAYS to the report.
Click WhereEl button in the columns toolbar. Click Assist. Add ACADEMIC_PERIOD as a simple parameter. Click OK.

Click New, Click Assist. Add FULL_COURSE_NAME as a simple parameter. Click Apply. Click OK to return to the report painter window.

Run the report. Enter 201210 for the ACADEMIC_PERIOD and MKT 3050 for the FULL_COURSE_NAME.

Close the output and parameter windows. Close and save your report. We are getting closer—almost done :)

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**Parameters**

<table>
<thead>
<tr>
<th>ACADEMIC_PERIOD</th>
<th>FULL_COURSE_NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>201210</td>
<td>MKT 3050</td>
</tr>
</tbody>
</table>

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**Report Data**

<table>
<thead>
<tr>
<th>ACADEMIC_PERIOD</th>
<th>FULL_COURSE_NAME</th>
<th>COURSE_SECTION_NUMBER</th>
<th>BUILDING_DESC</th>
<th>ROOM</th>
<th>BEGIN_TIME_AMPM</th>
<th>END_TIME_AMPM</th>
<th>MEETINGDAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>201210</td>
<td>MKT 3050</td>
<td>101</td>
<td>Thelma C. Raley Hall</td>
<td>4018</td>
<td>09:30AM</td>
<td>10:45AM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>102</td>
<td>Thelma C. Raley Hall</td>
<td>4010</td>
<td>11:00AM</td>
<td>12:15PM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>103</td>
<td>Thelma C. Raley Hall</td>
<td>4018</td>
<td>11:00AM</td>
<td>12:15PM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>104</td>
<td>Thelma C. Raley Hall</td>
<td>4012</td>
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<td>03:15PM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>105</td>
<td>Thelma C. Raley Hall</td>
<td>4012</td>
<td>03:30PM</td>
<td>04:45PM</td>
<td>TR</td>
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<tr>
<td></td>
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<td>106</td>
<td>Thelma C. Raley Hall</td>
<td>4012</td>
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<td>03:15PM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>107</td>
<td>Thelma C. Raley Hall</td>
<td>4012</td>
<td>09:00AM</td>
<td>10:15AM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>108</td>
<td>Thelma C. Raley Hall</td>
<td>4010</td>
<td>09:30AM</td>
<td>10:45AM</td>
<td>TR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>109</td>
<td>Thelma C. Raley Hall</td>
<td>4018</td>
<td>02:00PM</td>
<td>03:15PM</td>
<td>MW</td>
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<tr>
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<td>MWF</td>
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<td>111</td>
<td>Thelma C. Raley Hall</td>
<td>4018</td>
<td>12:30PM</td>
<td>01:45PM</td>
<td>TR</td>
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<tr>
<td></td>
<td></td>
<td>112</td>
<td>Thelma C. Raley Hall</td>
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<td>12:30PM</td>
<td>01:45PM</td>
<td>TR</td>
</tr>
<tr>
<td>350</td>
<td>ASU Center at Hickory</td>
<td>1110</td>
<td>01:30PM</td>
<td>04:10PM</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Run in a new window.
Create a new report called yourname31stulist. Use ASU_STUDENT_COURSE_CURRENT for your data file.

Click the BY button and add ACADEMIC_PERIOD, FULL_COURSE_NAME, COURSE_SECTION_NUMBER and NAME to the report.

Click WhereIf, Click Assist. Add ACADEMIC_PERIOD as a simple parameter. Click Ok.

Click New, click Assist. Add FULL_COURSE_NAME as a simple parameter. Click Ok. Click Ok again
Back at the Report painter Window. Click Run. Enter 201210 for ACADEMIC_PERIOD and MKT 3050 for FULL_COURSE_NAME.


<table>
<thead>
<tr>
<th>ACADEMIC_PERIOD</th>
<th>FULL_COURSE_NAME</th>
<th>COURSE_SECTION_NUMBER</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>201210</td>
<td>MKT 3050</td>
<td>101</td>
<td>Alevizatos, Christina D.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Allison, Jessica M.</td>
</tr>
<tr>
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<td>Arrowood, Justin R.</td>
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<tr>
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<td></td>
<td>Biggam, Hannah E.</td>
</tr>
<tr>
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<td></td>
<td>Carini, Brandon J.</td>
</tr>
<tr>
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<td></td>
<td>Cole, Kelly E.</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Davis, Mark E.</td>
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<td>Fioccola, Katherine V.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Fiori, Danielle L.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Heard, William N.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Hensley, Kelsey J.</td>
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<td></td>
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<td>Herring, Jordan B.</td>
</tr>
<tr>
<td></td>
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<td>Hodges, Kathryn E.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kieslowski, Paul</td>
</tr>
</tbody>
</table>
As you noticed we have created 3 detail reports about a course. Now we will create a course list report that we can add Multiple Drill Down reports to.

Create a New report called yourname31. Use ASU_STUDENT_COURSE_CURRENT as your data file.

Add ACADEMIC_PERIOD, COLLEGE_DESC, DEPARTMENT_DESC, FULL_COURSE_NAME as BY fields.

Click WhereIf, create a simple parameter using ACADEMIC_PERIOD. Click OK.

Click New, click Assist and add COLLEGE_DESC as the Column to Filter. Select equals as the logical relation, select parameter as the Compare Type, Click Compare Value and Select Multi Select OR as the variable type. Click Dynamic List. Pick STVCOLL as the Source file. Pick STVCOLL_DESC for the Values for Display Field and Values for Return Fields. Click Ok, Ok, Apply, Ok to return to the report painter window.

Run the report. Type in a TERM and pick one of the colleges. Close the output.
Back at the Report Painter screen, Right click on FULL_COURSE_NAME and select Options. Click the Drill Down Tab, Click Multiple Drill Downs, Click Add New and type in Student List for Course. Select Execute Procedure in the Drill Down Type drop down list.

Browse for your report yourname31stulist and select it. Select _blank in the Target Frame drop down list.

Click Add for with Parameters. Select ACADEMIC_PERIOD from the Parameter name drop down list, Select Field for Parameter value, then select ACADEMIC_PERIOD in the drop down list, click ok.

Click Add again for with Parameters. Select FULL_COURSE_NAME from the Parameter name drop down list. Select Field for Parameter value, then Select FULL_COURSE_NAME in the drop down list, click ok to return to the Drill Down Definition window.
Click Add new item in the Drill Menu Items window, Type Building for Course for the Name, Select Execute Procedure for the Drill Down Type, Browse to find your report yourname31building and select it, set the Target Frame to _blank.

Add Parameters ACADEMIC_PERIOD and FULL_COURSE_NAME.

Click Add new item in the Drill Menu Items window. Type Instructor for Course for the name. Execute the procedure yourname31instructor using a blank target frame.

Add Parameters ACADEMIC_PERIOD and FULL_COURSE_NAME.

Click Apply, click OK to return to the report painter window.

Save your report.
Run the report. Click on a Course and pick one of the choices to run. Is there anything you could add to the details to make them better?

Once you have run all your reports close all windows and parameter screens and close and save your report.

We are done with Multiple Drill Downs.

<table>
<thead>
<tr>
<th>ACADEMIC_PERIOD</th>
<th>COLLEGE_DESC</th>
<th>DEPARTMENT_DESC</th>
<th>FULL_COURSE_NAME</th>
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</thead>
<tbody>
<tr>
<td>201210</td>
<td>College of Business</td>
<td>Accounting</td>
<td>ACC 1050</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>ACC 2100</td>
</tr>
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<td>ACC 5080</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>ACC 5210</td>
</tr>
</tbody>
</table>

*Student List for Course Building for Course Instructor for Course*
Exercise 4.1
Creating and Using Hold Files

Create a new procedure in your class folder called yourname41

Select Report then select GORPRAC from the list of available data descriptions then click ok.

When the Report Painter opens, set the record limit and read limit to 200.

Click the Where/If button. Set the starting pidm to 1600.

(WHERE GORPRAC.GORPRAC.GORPRAC_PIDM GE 1600;)

Print GORPRAC_RACE_CDE by GORPRAC_PIDM.

Run the report.
Notice that there are three records for GORPRAC_PIDM 1617 with race codes 100, 200 and 500. Since there are five possible race codes, one person can have from zero to five records in GORPRAC. How can we get only one record per person and still get all values entered for race?

One way to do it is to use hold files. Save and close the procedure.

<table>
<thead>
<tr>
<th>GORPRAC_PIDM</th>
<th>GORPRAC_RACE_CDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600</td>
<td>500</td>
</tr>
<tr>
<td>1601</td>
<td>500</td>
</tr>
<tr>
<td>1602</td>
<td>500</td>
</tr>
<tr>
<td>1603</td>
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<td>100 200 500</td>
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<td>1622</td>
<td>500</td>
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<tr>
<td>1623</td>
<td>500</td>
</tr>
</tbody>
</table>
Open the report from the previous instructions.

Change the report to select only records with a GORPRAC_RACE_CDE of 100.

Change the title of the race code column to RACE_100..

Change the output to be FOCUS database. Name the output with your initials and RACE100 (like ptrace100).

   The index should be the GORPRAC_PIDM.

Run the procedure. Note that there is no output because it went to the hold file. Save and close the report.
Back at the procedure view screen, right click on the report icon.
Select “Copy”. Click on “Edit” at the top of the screen then select “Paste”.
Open the new report. Change the race selection to 200; change the file name to your initialsRACE200 and change the column title to RACE_200.
Continue copying the report and changing the values for 300, 400, and 500. Run it.
Can we join the five files we have created to get one record per person with all of the race codes in it?
No. None of the files has all of people In it. We need to either use matching or join to the files from another file. For this exercise, we will use the SPRIDEN table but you could use any table that has the pidms for the people you need to select.

Click on the diamond after the last report and select report again. Select SPRIDEN as the data file. Select the PIDM, ID and name fields from SPRIDEN, making the PIDM the by field and name fields detail fields.

Add a WHERE condition to select only records where the spriden change indicator is missing and spriden_pidm Greater then or Equal 1600.

\[(\text{SPRIDEN\_CHANGE\_IND} \text{ EQ} \text{ MISSING}) \text{ (SPRIDEN\_PIDM GE} 1600)\]

Set the read limit to 500 and the record limit to 200.

Click on the join icon. On the join screen, select “Add File”. Select the five files you just created by holding down the control key and selecting your files. The system will create the joins for you. Save and close the join screen.
On the Report Painter screen select Race_100, Race_200, Race_300, Race_400 and Race_500.

Run the report. Did you get only one record? Why?

Only one person (in our sample) has all five race codes entered.
We want all people from the SPRIDEN TABLE and records from each of the other tables that match by pidm.

Open the Join tool again.

Right click on each of the join lines and select “Multiple” and “Left Outer Join”. Run the report again.
We now have a report which shows the values in Banner for the race field but the values shown are not the values required by the State.

Change the output format of this report to be a FOCUS database file named yourinitialsrace with the SPRIDEN_PIDM as the index. Run, Save and close the procedure.

On the Procedure Viewer screen, click on the last connector. Select “Define” from the list. Select the hold file you just created. Define each of the five fields required by the State: RACE_W (500), RACE_B (300), RACE_N (100), RACE_A (200) and RACE_P (400).

RACE_N/A1=IF RACE_100 NE '100' THEN 'N' ELSE 'Y'
RACE_B/A1=IF RACE_300 EQ '300' THEN 'Y' ELSE 'N'
RACE_A/A1=IF RACE_200 EQ '200' THEN 'Y' ELSE 'N'
RACE_P/A1=IF RACE_400 EQ '400' THEN 'Y' ELSE 'N'
RACE_W/A1=IF RACE_500 EQ '500' THEN 'Y' ELSE 'N'

Click on “Check” to have the system check your defined fields. Save and close the Define screen.
Click on the next connector and select “Report”. Select the last file created then select the spriden_id, spriden name fields and all your define fields for the report.

Run the report. Close the output. Close and save your report.
Exercise 5.1

HDATE

Create a report called yourname51.

Select the Report Component. Select the TBBACCT table from the list.

Click the JOIN tool in the Font Toolbar. The Join dialog window opens.

Click the add button to select a file to join to.

Select spriden_current_asu_v from the list and join single left outer on the PIDMs. Click Save and close the dialog box.
Add TBBACCT_DELI_CODE, TBBACCT_ACTIVITY_DATE, SPRIDEN_ID, SPRIDEN_LAST_NAME, SPRIDEN_FIRST_NAME, and SPRIDEN_MI to the Report Painter Window.

Click the Where/If button and set the Retrieval Limit to 50.

Run the report and notice the format for TBBACCT_ACTIVITY_DATE.
We are now going to format the Activity_Date.

Click the Define tool in the Fonts Toolbar. Type Z_ACT_DATE in the Field box.

Select the Format box and click the Date/Time button. Select MDYY from Format. Click OK on both boxes.
Click the Functions… button on the Define Window and select the category Date and Time.

Scroll down the list of functions and select HDATE.

Place your cursor in the value box and double click TBBACCT_ACTIVITY_DATE from the list of fields.

Select YYMD from the format box and click OK.

Once you are back in the Define window, you will have to change the format in the Expression box to ‘MDYY’ so that it will match the Format you gave the Defined Field.

Click the Check… box to see that there are no errors. Click OK.
Add the new defined field Z_ACT_DATE to your report after TBBACCT_ACTIVITY_DATE and run the report again.

Close the output and close and save your report. You should be back at your folder.
Exercise 5.2
HGETC and DATEDIFF

Highlight and right click on yourname51 report in your folder and select copy.

Click anywhere in your folder, right click and select paste. Now you have a report named yourname511.

Right click on yourname511 and select rename. Rename the report yourname52. Open the report in the report painter.

First, we will define fields to store the current date.

Click the Define tool in the Fonts Toolbar.

Type Z_NOW in the Field box.

Select the Format box and click the Date/Time button. This time click the radio button for Date Time.

Select MDYY from Date Format and HH:MM:SS from Time Format. Click OK on both boxes.
Click the Functions... button on the Define Window and select the category Date and Time.

Scroll down the list of functions and select HGETC. Select Includes milliseconds for the length.

Select the field name you are creating as the outfield and click OK.
Your expression builder window will look like this:

The format for Z_NOW includes minutes and seconds. Use the HDATE function to capture only the Month/Day/Year.

From the Define Expression Builder, click New. Type Z_NOW1 in the Field box.

Select the Format box and click the Date/Time button. Select MDYY from Date Format and click OK for both boxes.

Click the Functions... button on the Define Window and select the category Date and Time.

Scroll down the list of functions and select HDATE.

Put your cursor in the value box and double click Z_NOW from the list of fields.

Select YYMD from the format box and click OK. Once you are back in the Define window, you will have to change the format in the Expression box to ‘MDYY’ so that it will match the Format you gave the Defined Field.
Now we can compare our activity date to the current date.

Click the Define tool in the Fonts Toolbar. Type Z_DIFF in the Field box.

Type I5 into the Format box and click in the expression box.

Click the Functions. Scroll down the list of functions and select DATEDIF.

Place your cursor in the start_date box and double click Z_ACT_DATE from the list of fields.

Place your cursor in the end_date box and double click Z_NOW1 from the list of fields.

Select Day from the unit drop down. Click OK. Check your function. Return to the report painter window.
Select the Z_ACT_DATE field in your report.

Double click Z_NOW1 and Z_Diff to add them to your report after the Z_ACT_DATE field.

Run the report.

Close the output. Close and save your report. Return to your folder.
Exercise 5.3

HPART

Create a report called yourname53. Select the Report Component. Select the TBRACCD table from the list.

Click the JOIN tool in the Font Toolbar. The Join dialog window opens. Click the add button to select a file to join to.

Select spriden_current_asu_v from the list and join on the PIDMs.

Double Click on the arrow between the 2 tables. Select Single, Left Outer Join. Click OK and Save. Close the dialog box.

Add TBRACCD_EFFECTIVE_DATE, SPRIDEN_ID, SPRIDEN_LAST_NAME, SPRIDEN_FIRST_NAME, and SPRIDEN_MI, TBRACCD_DETAIL_CODE, TBRACCD_AMOUNT to the report painter wndow.

Click the Where/If button and set the Retrieval Limit to 50.
Now we will format the date.
Click the Define tool in the Fonts Toolbar. Type EFF_MM_NUM in the Field box. Type I2 in the Format box.
Click the Functions... button on the Define Window and select the category Date and Time.
Scroll down the list of functions and select HPART.
Place your cursor in the Value box and double click TBRACCD_EFFECTIVE_DATE from the list of fields.
Select Month from the drop down list for component.
Place your cursor in the outfield box and double click the EFF_MM_NUM from the list of fields.
Click OK.
Your expression should look like this.

Click the Check… box to see that there are no errors. Click OK.

Select the first field in your report, TBRACCD_EFFECTIVE_DATE.

Drag EFF_MM_NUM in front of TBRACCD_EFFECTIVE_DATE and make it a BY field.

Click the Where/If button. Click New. Click the Assist button.

Use the expression builder to create the selection criteria. DETAIL_CODE = 8017 and TERM = 201110 OR 201120 OR 201130 OR 201140.

Click OK.

With the EFF_MM_NUM field selected click SubTotal in the Headings toolbar.
With the EFF_MM_NUM field selected click SubTotal in the Headings toolbar.

<table>
<thead>
<tr>
<th>EFF_MM_NUM</th>
<th>TBRACCD_EFFECTIVE_DATE</th>
<th>SPRIDEN_LAST_NAME</th>
<th>SPRIDEN_FIRST_NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>2012/05/09 11:31:43</td>
<td>xxxxxxxxxxxxxxxxx</td>
<td>xxxxxxxxxxxxxxxxxx</td>
</tr>
<tr>
<td>12</td>
<td>2012/05/09 11:31:43</td>
<td>xxxxxxxxxxxxxxxxx</td>
<td>xxxxxxxxxxxxxxxxxx</td>
</tr>
</tbody>
</table>

Run the report. Close the output, close and save your report.

<table>
<thead>
<tr>
<th>*TOTAL 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*TOTAL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*TOTAL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Exercise 5.4:
USING POSIT and SUBSTRNG

Create a report called yourname54.

Select the Report Component. Select the TBRACCD table from the list.

Click the JOIN icon and ADD SPRIDEN_CURRENT_ASU_V.

Create a Single Left Outer Join. Save the join and return to the report painter.

Add SPRIDEN_LAST_NAME, SPRIDEN_FIRST_NAME, SPRIDEN_ID, TBRACCD_TERM_CODE as BY fields. Add TBRACCD_DESC and TBRACCD_AMOUNT as detail fields to the Report Painter Window.

<table>
<thead>
<tr>
<th>SPRIDEN_LAST_NAME</th>
<th>SPRIDEN_FIRST_NAME</th>
<th>SPRIDEN_ID</th>
<th>TBRACCD_TERM_CODE</th>
<th>TBRACCD_DESC</th>
<th>TBRACCD_AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abey</td>
<td>Ashley</td>
<td>900339100</td>
<td>201030</td>
<td>EFOD</td>
<td>-519.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>201040</td>
<td>EFOD</td>
<td>-557.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>201110</td>
<td>EFOD</td>
<td>1076.64</td>
</tr>
<tr>
<td>Abors</td>
<td>Marishah</td>
<td>900325917</td>
<td>200810</td>
<td>EFOD-Amercorps</td>
<td>1000.00</td>
</tr>
<tr>
<td>Adams</td>
<td>Keisha</td>
<td>900367934</td>
<td>200740</td>
<td>EFOD-GOLDEN LEAF</td>
<td>1500.00</td>
</tr>
<tr>
<td>Aguero</td>
<td>Erica</td>
<td>900401065</td>
<td>200740</td>
<td>EFOD-GOLDEN LEAF</td>
<td>1500.00</td>
</tr>
<tr>
<td>Arnett</td>
<td>Hannah</td>
<td>900338335</td>
<td>200740</td>
<td>EFOD-PTSIL</td>
<td>2000.00</td>
</tr>
<tr>
<td>Arrington</td>
<td>Melissa</td>
<td>900341694</td>
<td>200740</td>
<td>EFOD-TASF</td>
<td>1200.00</td>
</tr>
<tr>
<td>Arrowood</td>
<td>Sharon</td>
<td>900378056</td>
<td>200740</td>
<td>EFOD-TSAF</td>
<td>1200.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>200820</td>
<td>EFOD-TASF</td>
<td>1200.00</td>
</tr>
<tr>
<td>Atwood</td>
<td>Phyllis</td>
<td>900334078</td>
<td>200740</td>
<td>EFOD-TSAF</td>
<td>1200.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>200820</td>
<td>EFOD-TSAF</td>
<td>1200.00</td>
</tr>
<tr>
<td>Avery</td>
<td>Felicia</td>
<td>900377500</td>
<td>200740</td>
<td>EFOD-GOLDEN LEAF</td>
<td>1500.00</td>
</tr>
<tr>
<td>Basham</td>
<td>Erin</td>
<td>900394760</td>
<td>200740</td>
<td>EFOD-PTSIL</td>
<td>1250.00</td>
</tr>
</tbody>
</table>
Click the Where/If button in the columns toolbar and set the Retrieval Limit to 100.

Click the Where tab. Click Assist.

Add TBRACCD_DETAIL_CODE in the column to filter, select equals for the Logical Relation, select Value for the Compare Type. Double click in the Compare Value box to add 9925. Click OK.

Click New in the Where Tab, click Assist.

Add TBRACCD_DESC in the column to filter, select is like for the Logical Relation, select Value for the Compare Type. Double click the Compare Value box to add EFOD%. Click OK.

You will have two parameters in your Where tab that are separate parameters. Click Apply. Click OK.
Now we will use the POSIT Function to find the position of the ‘-’ in the data field.

Click the Define tool in the Fonts Toolbar.

Type DASH_POSIT in the Field Name box. Type I1 in the Format box.

Click the Functions… button on the Define Window and select the category Character.

Scroll down the list of functions and select POSIT.

Place your cursor in the field box and double click on TBRACCD_DESC from the list of fields to bring it into the box.

Type 30 in the length box.

Type a dash in the substring box with single quotes around it.

Type 1 in the substring_len box

Place your cursor in the outfield box type DASH_POSIT

Click OK.
Your Define Builder box will look like this:
Click the Check... box to see that there are no errors. Click OK.

Select New. Type AWARD_CODE in the Field Name box. Type A5 in the Format box.

Click the Functions... button on the Define Window and select the category Character.

Scroll down the list of functions and select SUBSTR.

Place your cursor in the field box and double click on TBRACCD_DESC from the list of fields to bring it into the box.

Type 30 in the length box. Type 6 in the Start box. Type 11 in the End box. Type 5 in the Sub_len box.

Type AWARD_CODE in the outfield box.

Click OK.
Your define box will look like below.

Click the check button to check your work. Click OKJ if there are no errors.
Select the TBRACCD_DESC field in your report and drag & drop DASH_POSIT and AWARD_CODE after it.

Run the report. Close the output. Close and save your report.
Exercise 6.1

A simple Letter

Create a new report named yournam61 using spriden_current_asu_v.

Create a single inner join to spraddr_pr_asu_v. Set your retrieval limits to 50.

Click the Page heading button. Add Spriden_pidm to the report as a by field and hide it.

Place your cursor in the page heading of the report and change your font to Times New Roman size 12.

Change the Justification to Left Justification.
Add &DATEMtrDYY to the Page heading. Enter a couple of times.

Now add spriden_first_name and spriden_last_name making sure you have a space between them and enter to return to the next line.

Add spraddr_street_line1, enter to return to the next line.

Add spraddr_city then a comma then a space. Add spraddr_stat_code space add spraddr_zip.

Enter 4 times and type Dear add spriden_first_name and a comma.

The screen print below is how your letter should look so far.
Add the following text to your letter. Replacing yourname with your name.

I want you to know how much we appreciate the extra time you put in this week to get trained in Developer Studio. The customers will be well-served by your extra efforts and your unit will appear customer-oriented because you will deliver concise accurate reports.

Thanks so much again.

yourname

You will need to adjust the text so it looks good in the heading. Check the font size also.
Change the output type to PDF. You will probably have to adjust the text again. Set your retrieval limits to 10.

Select the hidden spriden_pidm and right click. Select options, Click the Sort tab, Click the Actions tab and select on from the drop down list for page break. Click apply, click OK.

Run the report.

Close the output after checking it out. Close and save your report.

May 9, 2012

Kevin Wilcox
314 Meadowview Dr Apt 607
Boone, NC 28607-4803

Dear Kevin,

I want you to know how much we appreciate the extra time you put in this week to get trained in Developer Studio. The customers will be well-served by your extra efforts and your unit will appear customer-oriented because you will deliver concise accurate reports.

Thanks so much again.
Linda
Exercise 7.1
Accordian Reports

Create a new procedure with Procedure Viewer called yourname71 using table ASU_STUDENT_COURSE_CURRENT.
Add COLLEGE_DESC, DEPARTMENT_DESC, and COURSE_IDENTIFICATION as BY fields.
(you should probably adjust the width of these fields so it’s easier to see your report).
Create a where statement for Academic_periods 200940, 201010, 201040, 201110.
WHERE ACADEMIC_PERIOD EQ '201040' OR '201010' OR '201110' OR '201110';
Add CREDITS_PASSED 3 times as a SUM field.

Add ACADEMIC_YEAR as an ACROSS field.
Click on the Sort Groups tab.

Click and drag a CREDITS_PASSED field onto COLLEGE_DESC, DEPARTMENT_DESC, and COURSE_IDENTIFICATION.

It looks like this when it’s done.
Go to Report->Features tab, check the Accordion Report check box.

Add the Total: Report->Output tab: Then select Summarize in the Totals box. Press OK.
Save and run the report. It should look like the following:

Play around with the + to see how it works. Close the output. Close and save your report.

<table>
<thead>
<tr>
<th>COLLEGE_DESC</th>
<th>CREDITS_PASSED</th>
<th>DEPARTMENT_DESC</th>
<th>CREDITS_PASSED</th>
<th>COURSE_IDENTIFICATION</th>
<th>CREDITS_PASSED</th>
<th>CREDITS_PASSED</th>
<th>CREDITS_PASSED</th>
<th>CREDITS_PASSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts &amp; Sciences</td>
<td>1,381,143.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College of Business</td>
<td>288,399.92</td>
<td>Accounting</td>
<td>46,483.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>15,460.91</td>
<td>BUS1050</td>
<td>671.34</td>
<td>939.00</td>
<td>1,446.00</td>
<td>1,401.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS2530</td>
<td>.</td>
<td>.</td>
<td>18.00</td>
<td>15.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS2531</td>
<td>.</td>
<td>.</td>
<td>15.00</td>
<td>9.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS2540</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS3030</td>
<td>.</td>
<td>66.00</td>
<td>84.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS3080</td>
<td>120.00</td>
<td>102.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS3530</td>
<td>5.00</td>
<td>.</td>
<td>45.00</td>
<td>24.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS3531</td>
<td>.</td>
<td>.</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS3535</td>
<td>.</td>
<td>.</td>
<td></td>
<td>15.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUS3536</td>
<td>22.00</td>
<td>.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise 8.1

Advanced Graph Assistant

Graph of students per college for the academic period 200940

Create a new procedure using the advanced graph assistant called yourname81. Use ASU_STUDENT_COURSE_CURRENT for your data file.
Select the Clustered bar for the Chart type.

In the properties for the chart select Engradient_combine from the drop down list for Apply Template. Select No for Use 3D effect.
Click the data selection tab. Add PERSON_UID to the Y axis by grabbing and dragging the field to the Y axis. Highlight PERSON_UID so you get the field properties and then in the Title type Number of Students. For the summary type Select Count. Leave all the other properties at the default settings.
Add COLLEGE_DESC to the X group axis by dragging and dropping the field.

Highlight the COLLEGE_DESC field to get the Field properties dialog box and Type College in the Title box.

Sorting should be Ascending.
Highlight Filters. Notice you get an expression builder below the graph preview.

Double Click ACADEMIC_PERIOD to get the field in the expression builder. Select equal to from the drop down box.

Double click Select Values and enter 200940 in the constant box. Click OK.

Your expression should look like below.
Click the Chart Editor Tab and select Background under the chart folder and set all the colors to white. Select Frame and set all the colors to white. Select Data labels and for Show Data Values select Yes from the drop down.
Under the titles folder Select Title and for Chart Title type Student Count for Academic Period 200940.
Click on the Ordinal Axis folder then select General. Change the line border color to white. Make sure all the other colors are white.

Click on Labels and change the Text Rotation to 45 degrees.
Under Major Gridlines change the colors to white. Under Major Grid Color Bands change the colors to white. Under Minor Gridlines change the colors to white.

Under the Y1 axis click on Title and type in Number of Students. Click General and change all the line border colors to white. Change the line colors to white.

Under Major Gridlines change the colors to white. Under Major grid Color bands change the colors to white. Under Minor gridlines change the colors to white.

Notice the example below. Your preview should look like this. No gridlines, no shading.
Save your graph. Then run it to see how it looks.
Exercise 8.2

Graph of graduates by college and department with a drill down on the college with gender counts

Create a new procedure called yourname82detail. Click on the diamond and select report. Select ASU_ACADEMIC_OUTCOME from the table list.

Add COLLEGE_DESC, DEPARTMENT_DESC to the report as BY fields. Click WHERE/IF button and create a simple parameter for ACADEMIC_PERIOD and COLLEGE_DESC. Create a new Where statement for STATUS_DESC = 'Awarded'

STATUS_DESC EQ 'Awarded'

Click the JOIN tool and add ASU_PERSON_DETAIL as a single inner join.

Add PERSON_UID after DEPARTMENT_DESC and click SUM then pick CNT.DST so you have a count. Then add GENDER after and make it an across field. Click on COLLEGE_DESC and select SubTotal. This will give you a total by College.

Your report should look like below. Save and close the report.
Create another new procedure called yourname82

Click on the diamond in the procedure viewer and select Advanced Graph. Select ASU_ACADMIC_OUTCOME from the table list. Select PIE graph from the Chart Type. Pick FLEXgradient for the template.
On the data selection tab. Drag COLLEGE_DESC to the slices. Drag PERSON_UID to the measures. Highlight the PERSON_UID field to get the Field properties dialog and change the summary type to COUNT. Drag ACADEMIC_PERIOD to Multi-graph. Click on Filters and Build a Multi Select OR for the ACADEMIC_PERIOD using 200940, 201010, 201040, 201110, 201140. Drag STATUS_DESC to the filters area and create a filter for STATUS_DESC = AWARDED.
Highlight CNT.PERSON_UID to get the properties for the field and click the three periods for Drill Down. Pick Execute procedure radio button and browse to find yourname82detail. Select it.

Click the Add a parameter button. Parameter Name COLLEGE_DESC then click the Field radio button and select COLLEGE_DESC from the drop down list. Click OK

Click the Add a parameter button again. Parameter Name ACADEMIC_PERIOD then click the Field radio button and select ACADEMIC_PERIOD from the drop down list. Click OK. Click OK to return to the Field properties.

Click on Chart Editor tab. Save your graph at this point.
Click on Quick Chart and change the legend position to Bottom.
Change the Pie Label display to Name, Absolut and Percent Value.
Click on General under Legend and change Show Legend to NO.
Run the graph. Pick just one Academic period the first time then drill down on a College.
Next pick several Academic periods and drill on the separate graphs. Save and Close your graph.
Exercise 8.3

Enrollment breakdown by class

Create a new graph using ASU_ACADMIC_STUDY_CURRENT called yourname83

Select Vertical Cluster Bar for your chart type.

Use the Template Engradient_combine

Change 3D effect to NO.
Click on the Data selection tab and add PERSON_UID to the Y axis. Highlight PERSON_UID and change the summary type to Count.

Add STUDENT_CLASSIFICATION_DESC to the X group axis. Make sure sorting is ascending.

Click on Filters and add ACADEMIC_PERIOD Equals 200940 and REGISTERED_IND equals Y.
Click on the Chart Editor tab and change the Title to Enrollment Breakdown by Class for 200940.

Change the Ordinal axis title to CLASS and change the Label Text Rotation to 45 Degrees.

Change the Y1 axis Title to STUDENT COUNT.

Save the Chart. Run the Chart. Close and Exit.
Exercise 8.4

Chart of Students by campus for academic period 200940.

Create a new graph called yourname84 using ASU_ACADEMIC_STUDY_CURRENT.

Select Vertical Cluster Bars for your Chart type. Change the Apply Template to Cylinders on Gray. Change 3D effect to yes.

Click the Data Selection tab and select PERSON_UID and crag it to the Y-axis. Highlight PERSON_UID and change the summary type to COUNT.

Find CAMPUS_DESC in the fields list and drag it to the Group Axis.

Click Filters and double click ACADEMIC_PERIOD to get it in the parameter window. Create the statement Where ACADEMIC_PERIOD Equal to 200940.
Click the Chart Editor tab. Click Quick Chart and add Students By Campus for Academic Period 200940 for the Chart Title.

Click Ordinal axis and change the Title to CAMPUS. Change Labels Text Rotation to 45 degrees.

Click Y1 axis and change the Title to NUMBER OF STUDENTS.

Save the chart. Run it. Is there a better way to Chart this? Close the chart.
Exercise 8.5

Chart of Distance Education Students by Campus for an academic period.

Create a new chart using ASU_ACADMIC_STUDY_CURRENT name yourname85. Select Pie Chart from the Chart Type tab. Select Golden for Apply Template.
Click on the Data Selection Tab. Select PERSON_UID for the measures and make the summary type COUNT. Change the title to Number of Students.

Select CAMPUS_DESC for the slices.

Add Filters as follows REGISTERED_IND Equals Y and CAMPUS Not Equal to MC and ACADEMIC_PERIOD Equals to a dynamic parameter list.
Select the Chart Editor tab. Select Quick Chart and Set the Chart Title to Distance Education Students by Campus.

Set the legend position to Top Left. Set the Pie Label Display to Name and Absolute Value.

Click General under Legend and change Show Legend to NO.

Run the Chart. Save and close.
Exercise 8.6
Chart of Students by race with a drill down to gender and Class by Academic Period.

Create a new report using ASU_ACADEMIC_STUDY_CURRENT with a single inner join to ASU_PERSON_SENSITIVE_RACE.
Add RACE_DESC as the first BY field. Add STUDENT_CLASSIFICATION_DESC as the next by field. Add PERSON_UID and make it CNT.DST. Next Add GENDER_DESC as an across field.
Highlight RACE_DESC and change the title to ETHINICITY. Highlight STUDENT_CLASSIFICATION_DESC and change the Title to CLASS.
Highlight CNT.DST.PERSON_UID and removed the Title so there is no title. Highlight GENDER_DESC and remove the title so there is no title.
Highlight ETHINICITY and click SubTotal.
Click the Where/If tab and create a simple parameter for ACADEMIC_PERIOD and RACE_DESC.
Also create a selection for REGISTERED_IND Equals Y.
Save the report and Close it. Make sure you are all the way to your folder in developer studio.
Create a new procedure called yourname86.

In the procedure view click on the diamond and select JOIN. Select ASU_ACADEMIC_STUDY_CURRENT as your driving table. Then click the Add button and Select ASU_PERSON_SENSITIVE_RACE. Make the JOIN a Single Inner Join. Save the JOIN and close.

Click on the diamond after the Join in the procedure viewer and select Advanced Graph.

Select ASU_ACADEMIC_STUDY_CURRENT from the table list.
Pick a PIE chart from the Chart type tab. Pick a Template that you like. I picked True Colors.

On the data selection tab scroll down in the fields list and notice that the two tables are available for you to pick from.

Select PERSON_UID from ASU_ACADEMIC_STUDY_CURRENT and drop in Measures.

Highlight the PERSON_UID field in Measures and change the Summary Type to Count. Add COUNT as the Title.

Select RACE_DESC from ASU_PERSON_SENSITIVE_RACE and drop in Slices.

Highlight RACE_DESC field in Slices and make the Title ETHINICITY.
Click Filters and add ACADEMIC_PERIOD as a Dynamic list parameter. Add REGISTERED_IND equals Y.

Drag ACADEMIC_PERIOD to Multi Graph.

Click CNT.PERSON_UID in Measures and click in the Drill Down box for the Field properties to add a procedure.

Click the Radio button for Execute a procedure and browse to find yourname86detail.

Click the add parameter button and add ACADEMIC_PERIOD for the Parameter Name, Click the radio button for Field for the Parameter Value and select ACADEMIC_PERIOD from the list. Click Ok.

Click the add parameter button and add RACE_DESC for the Parameter Name, Click the radio button for field for the Parameter Value and Select RACE_DESC from the list. Click Ok. Then click OK again to return to the field properties window.
Click the Chart Editor Tab.

Click Data Labels under Chart and Change Pie Label display to Name, Absolute and Percent Value.

Save and Run your report. Click on a slice or the Data label. Your drilldown report should run.

Save and close the graph.
Exercise 9.1

HTML Editor

Right Click in your folder and select New -> HTML File. Name the New Html file yourname91, make sure files of type is Html files, make sure Create with is Composer. Click Create.
You are presented with the template selector. Just click Cancel to get to the HTML editor window.

We are not going to select a template at this time.
Click A to insert a TEXT box. You will get a crosshair to draw with on the design grid. Draw your TEXT box then type ‘ My First HTML Page’

Change the Font to Century, Bold, 14pt and click OK.

Next we are going to change the color of our Title.
In the Properties dialog. Click the elisp for Styling Advanced to bring up the Style Composer Window.

Click Font and under Font attributes select Maroon for the color. You can also select different colors by clicking the Elipse button to the right of Color.

Click OK to save the color and return to the Design Window. Next we will insert a report we have already created.
Click Insert, select Import Existing Procedure. Select yourname31 for the source file, click Open.

You are presented with the Manage Layout dialog box with Table selected. Just Click OK here.
Next you are presented with the New Parameters dialog for the report. Notice that there are Check boxes to create the Control on the page. Change the control type for College_desc to Drop Down list. Make sure Create controls for all Parameters is checked. Then click OK.
Size your report output window to display all the fields of the report.

Resize the Academic Period Text Entry box smaller.

Select the College_Desc and the List box by Holding down the Ctrl Key while clicking each one. Once you have them both selected move them closer to the Academic Period parameter now that it is resized.

Your design should look like the screen print below. Save your changes so far.
Run the report. Notice your multiple drill down lists is available. When you run one of these they open in another window. Close and save your html page.

My First HTML Page

<table>
<thead>
<tr>
<th>ACADEMIC_PERIOD</th>
<th>COLLEGE_DESC</th>
<th>DEPARTMENT_DESC</th>
<th>FULL.Course_Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>201030</td>
<td>College of Education</td>
<td>Curriculum and Instruction</td>
<td>C12300</td>
</tr>
<tr>
<td></td>
<td>College of Fine &amp; Applied Arts</td>
<td></td>
<td>C13000</td>
</tr>
<tr>
<td></td>
<td>College of Health Sciences</td>
<td></td>
<td>C13015</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C13750</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C13850</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C15600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C15625</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C15636</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HED 3100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HED 3900</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HED 4650</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HED ELEC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Educational Leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FDL 7099</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FDL 7500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FDL 7999</td>
</tr>
</tbody>
</table>
Exercise 9.2
Create an HTML page with a Graph

Right click anywhere in your folder and select New -> HTML File.
Name the HTML file yourname92. Make sure Files of type is Html files and Create with is Composer.
Click Create.. Click Cancel on the Template selector window.
Click the A to add a Text box to your page and create a Text box. Center the Text. Type “My Second HTML Page”

Click the Line button and add a Line under your Title. Click the image button and draw an area for an image. Pick the logo_asu_sm image and
Click ok to insert the image.
Click the Graph button and draw a space on your html page for the graph.

Right click inside the Graph area and Select import existing graph. Select yourname86 and click open. Make sure Create controls for all parameters is checked and click OK on the new parameters screen.
Fix the Title Academic Period. Resize the drop down list box so it looks better. Save the page.

Ruin it. Notice when you drill down the detail is in the same area as the graph. In order to return to the graph you have to click the back button in your browser. Close your output and return to the design window in the HTML editor. Save and close your page.
Exercise 9.3
Create an HTML page without using already created reports or graphs.

Create a new html file named yourname93 by right clicking anywhere in your folder and selecting New -> HTML File.
Making sure the files of type are Html files and Create with is Composer.
Click cancel on the template selection window to get to the blank HTML design page.
Draw a Text Box on your HTML page and enter the following for a title “GRADUATES BY COLLEGE AND DEPARTMENT FOR A TERM “

Click on the report icon on the toolbar and draw a box on your HTNL page for the report. Double click inside the report box and select ASU_ACADEMIC_OUTCOME as your table from the table list window for the report and click OK. You are now in the report painter where you will build a report.
Add COLLEGE_DESC, DEPARTMENT_DESC as BY fields to the report. Add PERSON_UID and make it a SUM then Select CNT.DST.

Click Where/IF button in the columns toolbar and create the following statements.

ACADEMIC_PERIOD_GRADUATION equals a simple parameter.

COLLEGE_DESC equals a single select dynamic parameter

STATUS_DESC equals Awarded
Remove the title from the PERSON_UID count field. Make a SUBTOTAL on Department description. Run the report and make sure it is giving you totals on the department for an Academic period.

Save the report and close.

This will return you to the HTML editor and prompt you for creating the parameters. Just Click OK.
You will want to resize the Parameters entry boxes and also change the titles.

Change ACADEMIC_PERIOD_GRADUATION title to ACADEMIC PERIOD

Change COLLEGE_DESC Title to just COLLEGE.

Next we will create a Graph that will be linked to this report.
Click on the Graph tool button and draw the graph area next to your report on the design grid.

Right click inside the graph layout on the design grid and select Advanced Graph Assistant from the list.

Select ASU_ACADEMIC_OUTCOME from the Table List. Click OK.
Select Pie for the graph. Select Color to White for the Template. Leave Use 3D effect to Yes.

Click on the Data selection tab and drag PERSON_UID to Measures.

Highlight PERSON_UID and Select COUNT for the summary type. TYPE “Graduates” for the title

Drag DEPARTMENT_DESC to Slices. Highlight and type “Department” for the title.

Click on Filters and drag ACADEMIC_PERIOD_GRADUATION to the Filters window.

Create a simple parameter for ACADEMIC_PERIOD_GRADUATION

Create another simple parameter for DOLLEG_DESC.

Create a statement for STATUS_DESC equals Awarded.

Click on Chart Editor tab and under quick chart change the Pie Label Display to absolute value

Click Quit. It will prompt you to save. You are now returned to the design window of HTML Editor. Click Run. Save and close.
Exercise 10

Layout Composer

1. Begin a new WebFOCUS Procedure and choose to use Composer
2. Name the procedure yourname101
First click in the main area of the layout composer page and then choose Import Existing Procedure
Pick the 1_REPORT BY COLLEGE-GRAPH by clicking the folder icon to go back from your folder and find the teacher folder and select the report. Then click open.
Your screen should look like below.
Repeat the previous steps and import the report 1_REPORT BY COLLEGE into the composer window.
Now use the Properties Pane on the right side of the screen to change the Compound Document orientation to landscape.
You can close the properties box temporarily to better see how to align the graph and the report.
Choose VIEW, PROPERTIES from the top menu. The properties pane will reappear.
Click on the graph. In the properties pane Change POSITION LEFT to 2.2 Change POSITION TOP to 2.0

Click on the report. In the properties pane Change POSITIO LEFT to 6.2 Change POSITION TOP to 2.0

Click anywhere on the composer page.

Choose INSERT, TEXT from the top menu.

Draw a text box and enter the title “Appalachian State University Student Count—Fall 2011. Right click on the text and choose the style you pre-

fer.

To center the text, highlight the text box and click the centering icon on the top menu.
Click on the report and change SIZE AND OVERFLOW to FLOWING in the properties pane.

This will allow the report to expand as necessary to accommodate the lines of data in the report.
From the top menu, choose **INSERT** then **Add Table of Contents Page**.

Select **Table of Contents** in the top drop down box in the **Properties Pane**.

Change the page orientation to **LANDSCAPE**.
Now run your report. An untitled Table of Contents should be generated, as shown below.
To complete the Table of Contents, select each element of your report in the properties pane and edit the TOC description.

Select the Graph object on the page. For TOC Description enter “Student Count by College Graph”

Select the Report object on the page. For TOC Description enter “Student Count by College Report”
You are now ready to run the report!

Your Table of Contents should look similar to the one below.

```
Table of Contents

1. ASU Students - Fall 2011
   1.1. Student Count by College Graph
   1.2. Student Count by College Report

1
1
1
```
Your Student Count Report should look like the one below.

Just for fun, I added drilldowns to the Student Count report.

Click on a college to drill down to the majors offered, individual students, their schedules, and to see who enrolls in a particular course.

Save the document so far.
Since this is like a document that we would send to someone. Let’s put the report on one page and the graph on one page.
Remove the report from the page. Resize the graph to be larger. Change the TOC description to read - “Student Count by College Graph”
Click Insert in the Menu and select Insert New Page Layout. Select the new page from the properties window. Click in the page layout window. Select insert from the menu then import existing procedure and select 1-REPORT_BY_COLLEGE from the teacher folder.

Move the report and size it to your liking. Change the Size and Overflow to FLOWING.
Click the report object to select it and change the TOC description to “Student Count by College Report”

Run the report. Notice your Table Of Contents changed. Click on one of the titles in the table of contents to get to that report.

Close and save your report when you are finished.

Table of Contents

1. Student Count by College Graph
   1.1. Student Count by College Graph 1
2. Student Count By College Report
   2.1. Student Count by College Report 2