

FSREPORT... the Graphical PROC REPORT

Prepared by



INTRODUCTION

The FSREPORT interactive window was created to allow graphical support of online report creation and viewing. It is currently available under the windowing platforms. It was designed from the character based REPORT window (Interactive PROC REPORT).

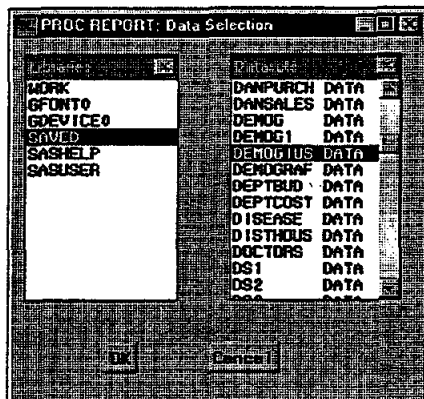
THE FSREPORT ENVIRONMENT

Starting an FSREPORT Session

An FSREPORT session can be started by typing FSREPORT on the command line.



Select the SAS data set you wish to run a report on.



Then hit . The following screen will be displayed.

AGE	SEX	WEIGHT	HEIGHT	STATIC	CHLDRN	CANC	SALARY	CHA
18	M	85.5	72	S	0	0	9008	low
21	F	63	82	M	2	1	25410	high
22	F	54	82	S	1	1	14200	low
22	M	64	60	S	0	1	13592	low
26	M	66	75	D	1	1		low
28	M	67	82		2	0	11008	low
28	F	56	82	S	0	0	12050	low
30	F	56	83	P	1	1	16875	high
31	M	67	89	M	0	2	25200	high
36	M	61	65	M	2	1	30360	high
36	F	63	71	W	1	1	10520	low
38	M	68	74	M	2	1	25700	high
40	M	88	81	M	2	1	19483	high
42	M	71	75	M	1	2	29700	high
42	M	74	68	M	3	2	28975	high
43	F	62	73	M	2	0	13840	low
44	M	70	68	M	1	2	24500	high
46	M	68	72	P	3	1	37600	high
49	M	71	78	M	1	2	18750	high

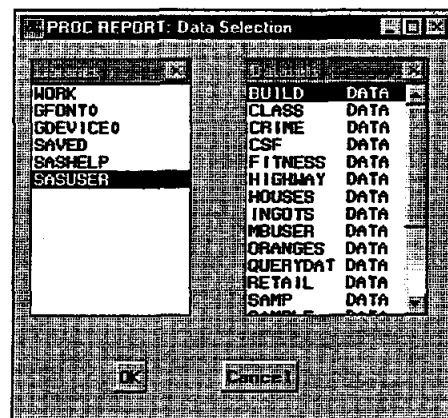
Opening A SAS Data Set

When you are in the report session, it is possible to open up another SAS data set to create a report on. The report layout you create can be used with any other SAS data set with the same variable names used in the report.

Select File, Open, Data Set.

This window appears for you to make your selection.

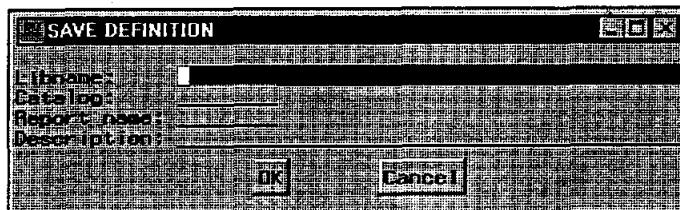
For now, let's out of this and use the current data set we are already working with.



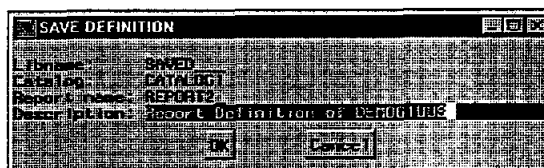
Saving The Report Definition

Alternatively, you can save the Report definition as a member of a catalog. Select File, Save, Report definition.

A window prompts you for the location.



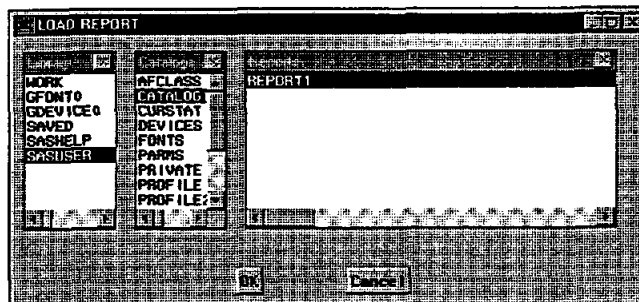
We choose the save the report definition to the Library **SAVED**, Catalog **CATALOG1**, and entry in the catalog called **REPORT2**. The entry type is **REPORT** by default. SAS takes care of this part.



Select to save the definition.

Opening A Report Definition

It is possible to use FSREPORT while pulling up an existing Report Definition created in an earlier session. Select File, Open, Report Definition to see a listing. Select the Library and Catalog the Report definition is stored in.



Saving The Report Data

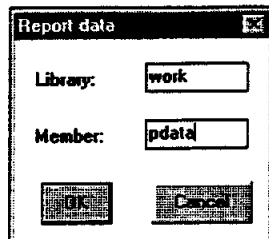
After organizing the report, it is possible to save the restructured data to a SAS data set. Select File, Save, Report data.

beginning tutorials

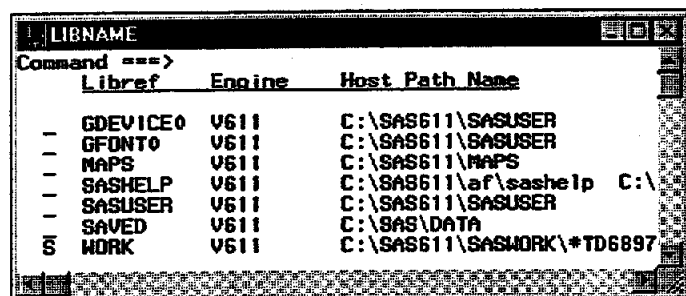
The Report data screen appears allowing you to specify the location.

In this example, we place it into WORK.PDATA.

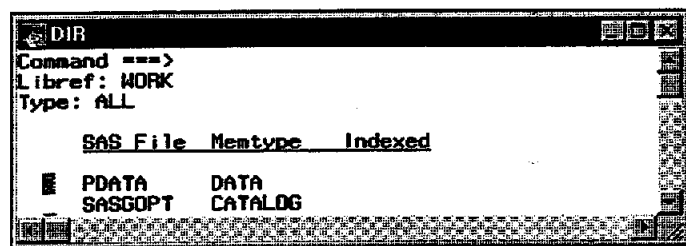
Select  to save the report data to a SAS data set. To verify this worked, select Globals, Access, Display libraries.



The LIBNAME window appears. Select on the WORK library.



The DIRectory window appears showing the SAS data set. Select the SAS data set to see its internal structure.



Select Close three times to back out of each of the windows.

Printing The Report

It is possible to print the report by selecting File, Print.

The options window appears allowing you to specify the setup or any options.

If we select , the standard windows style setup for this platform is then available.

The Print Setup screen is then displayed. We can select the printer. If we select More, the Properties window for the printer is displayed.

If we back out of the Properties window and select Page, the Page Setup window is displayed allowing us to adjust our margins and change the orientation of the report.

If we back out and select Fonts, the Font window is displayed. This allows us to select the default font for the report when it is printed.

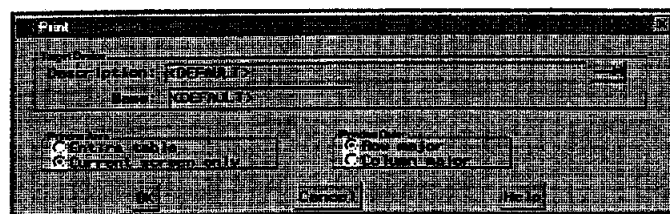
To back out of any of these windows, simply click on .

Alternative Report Printing

To print the report, simply select the selection you want to print or do not select anything for the entire report. Right click to pull up this menu. This menu gives you the ability to clear any current selections on the report.

Let's examine Print Setup...

This screen allows you to define how the report prints and where it will go.



Alternatively, to print, select Print from the Popup menu.

Ending An FSREPORT Session

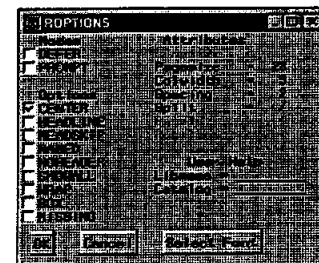
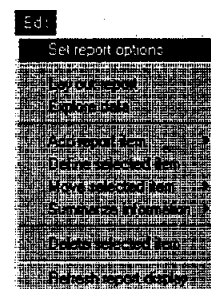
Once you are satisfied with the way the report looks, you can End out of the session and return to Display Manager by selecting File, End.

CREATING REPORTS

Setting Report Options

Let's examine how we can set options on a report. We will explore the Edit pull down selection.

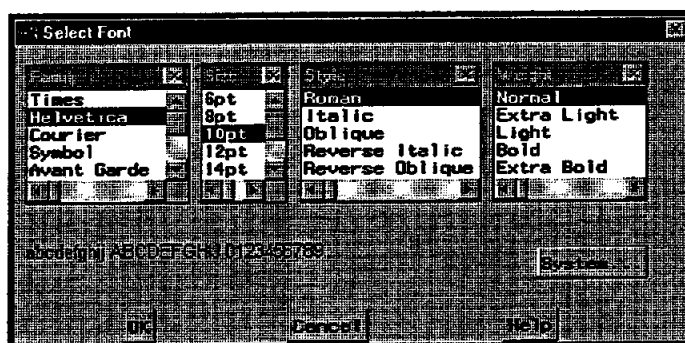
The options available with FSREPORT are listed in the following window. There are check boxes for each option. To turn an option on, simply check the item. It is not checked, the option is off. Other options that require values can be set.



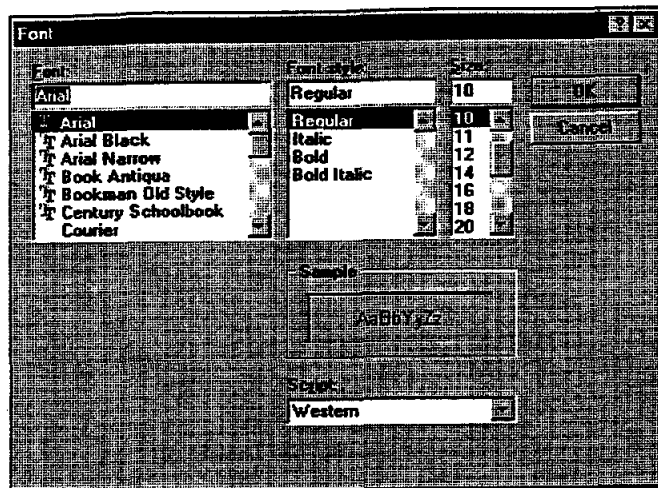
The Font can be selected by clicking on



to display the following window.



If these fonts are not appropriate, consider the  button to give you the full selection of Operating System fonts.



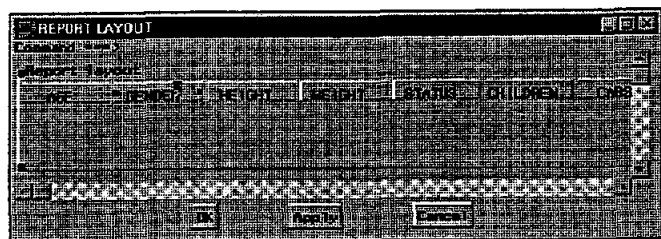
Select **OK** and **OK** after you have made your selections.

Rearranging Columns On The Report

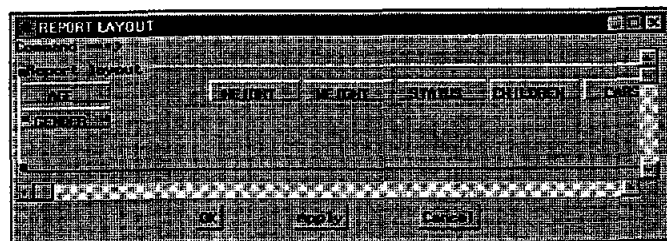
It is possible to rearrange columns on the report by selecting Edit, Lay out report.

This feature is one of the biggest differences between PROC REPORT and FSREPORT. You have the ability to adjust the column order as you desire while working in the report.

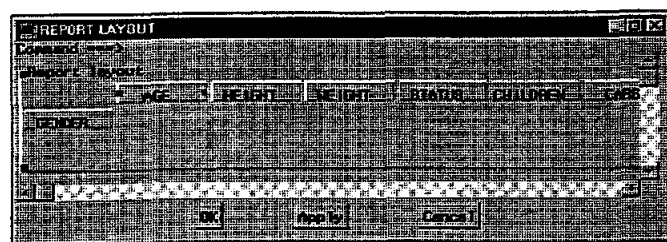
Place your cursor on a column you would like to move. We point to GENDER.



Hold the left mouse button down and pull the column label over.



Do the same for AGE. Move it to the right.



When you select **OK**, the report is reordered.

GENDER	AGE	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS
M	18	85.5	72	S	0	0
F	21	63	62	M	2	1
F	22	54	52	S	1	1
M	22	64	60	S	0	1
M	26	66	75	D	1	1
M	26	67	67		2	0

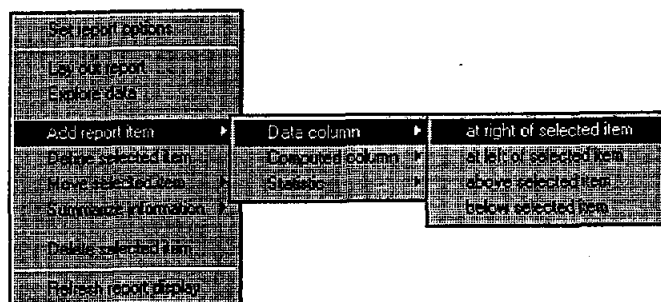
Adding A Report Item

It is possible to add a report item such as an additional column on the report. Point to the column label where you want to add an item.

GENDER	AGE	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS
M	18	85.5	72	S	0	0
F	21	63	62	M	2	1
F	22	54	52	S	1	1
M	22	64	60	S	0	1
M	26	66	75	D	1	1
M	26	67	67		2	0

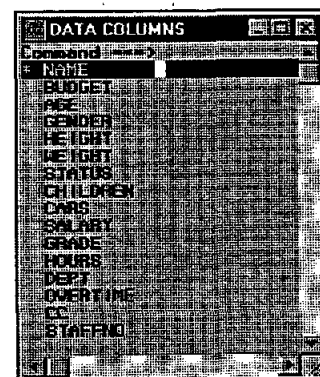
Click the right mouse button and select Add report item.

The following selection appears. You can select to add a column of data, a column created from a computation, or a statistic.



After making your selection, the next screen appears prompting you for the location of the item relative to where you are in the report.

Make a selection and then it prompts you with the selection of the available variables. In this example, we select NAME. It becomes highlighted.



Then we click in the upper left and close the window.

The new item appears in the report.

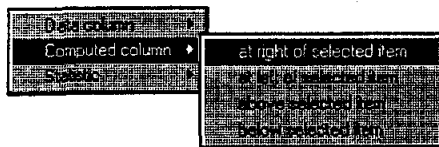
GENDER	AGE	NAME	HEIGHT	Weight	STATUS
M	18	Dave Derry	85.5	72	S
F	21	Julia Pendlebury	63	62	M
F	22	Norman Harvey	54	52	S
M	22	Harold Hicks	64	60	S
M	26	Mary Molesworth	66	75	D

Adding A Computed Column

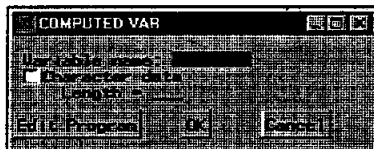
FSREPORT also allows you to add a computed column in the report. Highlight the target column to insert next to.

REPORT						
GENDER	AGE	NAME	HEIGHT	WEIGHT	STATUS	
M	18	Dave Derry	65.5	72	S	
F	21	Julia Pendlebury	63	62	M	
F	22	Norman Harvey	54	52	S	
M	22	Harold Hicks	64	60	S	
M	26	Mary Molesworth	66	75	D	

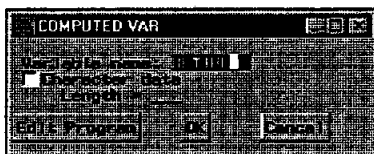
Right click, select Add report item and Computed column. Then select the relative location.



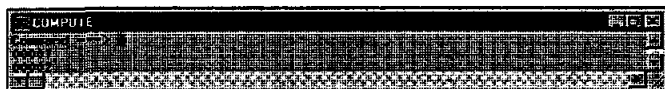
You are prompted for the name of the computed variable.



Let's specify the name RETIRE.



Click **Edit Program** to get the following screen.

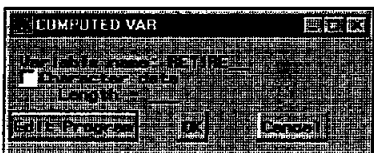


We can specify the computed calculation in this window.



Close the window.

Select **OK** and the new column appears in the report.



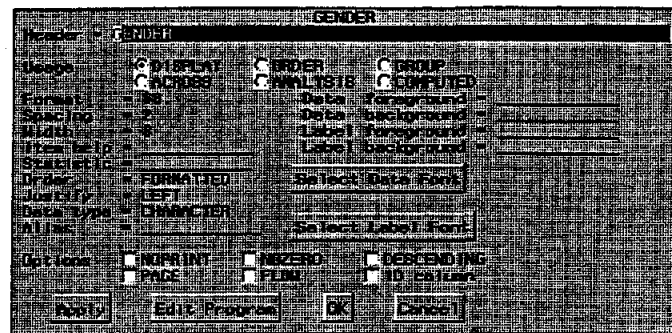
REPORT						
GENDER	AGE	RETIRE	NAME	HEIGHT	WEIGHT	
M	18	47	Dave Derry	65.5	72	
F	21	44	Julia Pendlebury	63	62	
F	22	43	Norman Harvey	54	52	
M	22	43	Harold Hicks	64	60	
M	26	39	Mary Molesworth	66	75	
M	28	37	Bob Bobington	67	82	
F	28	37	Mark Bamford	56	52	
F	30	35	Jeremy Kidd	66	63	
M	31	34	Helen Cinderford	67	69	
M	36	29	Mark Chapel	61	65	
F	36	29	Jennifer Dawson	63	71	
M	38	27	Julio Jennings	68	74	
M	40	25	Shirley Walters	66	61	
M	42	23	David Duley	71	75	
M	42	23	Dawn Duwet	74	68	
F	43	22	Steve Jones	62	73	
M	44	21	Brian Ellows	70	68	

Defining Columns

We also have the ability to redefine each column on the report. This feature affects formatting, usage and many other topics. Highlight the column whose definition you wish to modify.

Click the right mouse button and select Define selected item.

The following screen appears.



We will change this to the usage of Order instead of Display.

In the DEFINE statement, you specify a report item's usage with one of the following:

ACROSS	DISPLAY
ANALYSIS	GROUP
COMPUTED	ORDER

ACROSS Usage

When using a column as an ACROSS variable, a column is created for each formatted value. The columns are ordered by the ascending, formatted values. To change this, consider using the DESCENDING and ORDER= selections when defining the variable.

ANALYSIS Usage

An analysis variable is designed to create a statistic on a numeric variable for all observations that make up the contents of a data value or cell in the report.

COMPUTED Usage

Computed variables can be defined in the report. They are calculated when the report executes and are stored on the output data set if it is created.

DISPLAY Usage

Display variables are simply displayed as is in the report. This is the default and they do not affect ordering or grouping.

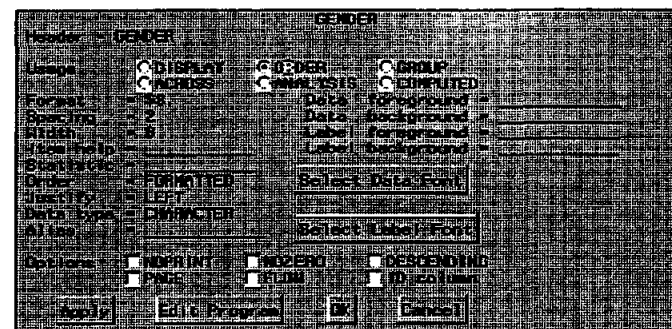
GROUP Usage

Group classification attempts to group observations by unique values. This is typically used for summarization. The default is to order the resulting rows by the ascending formatted values. This classification looks for variables using a statistic. These values are collapsed with the statistic, according to the group.

ORDER Usage

This orders the resulting report by the variables defined as ORDER. The observations are ordered according to their ascending, formatted values by default. Repeated values in subsequent observations are not displayed.

For this example, we will select ORDER, then hit **Apply**.



The data is now ordered according to GENDER with subsequent values of F and M not displayed.

AGE	GENDER	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRADE
57	F	53	62	M	2	2	33520	high
61		55	62		2	1	25410	
21		63	62		2	1	25410	
48		65	66		2	1	15840	
51		67	68		5	0	22760	
61		57	69		3	1	22582	
45		62.5	72		1	1	15410	
60		66.5	71		3	2	20582	
34		78	72		2	1	28512	
56		52	60		3	2	47520	
52		66	68		5		23760	
65		67	71		2	1	14840	low
43		62	73		2	0	13840	
26		87	74		1	1	8870	
24		52	65		0	1	12512	
65		67	81		2	1	13840	
56		61	61		0	2	13760	
36		53	68		1	0	8870	
38		69	56		2	1	14840	

Changing Data Fonts

Selecting Define from the menu again brings up the following window.

We have the ability to change data fonts at will. Select

Select Data Font

The following screen appears.

When changing your selection of fonts, consider using a fixed space font. Proportional spaced fonts don't always line up in a column.

When you are finished, select **OK**.

When viewing the report, the new fonts are displayed.

AGE	GENDER	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRADE
57	F	53	62	M	2	2	33520	high
61		55	62		2	1	25410	
21		63	62		2	1	25410	
48		65	66		2	1	15840	
51		67	68		5	0	22760	
61		57	69		3	1	22582	
45		62.5	72		1	1	15410	
60		66.5	71		3	2	20582	
34		78	72		2	1	28512	
56		52	60		3	2	47520	
52		66	68		5		23760	
65		67	71		2	1	14840	low
43		62	73		2	0	13840	
26		87	74		1	1	8870	
24		52	65		0	1	12512	
65		67	81		2	1	13840	
56		61	61		0	2	13760	

Defining Other Columns

We can define additional columns by using the Define selected items option. Here we highlight Age and select:

The following screen is displayed.

We change the usage of AGE to ORDER.

Select **OK** and the following screen is displayed.

AGE	SEX	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRA
18	M	65.5	72	S	0	0	8008	low
		65	78		0	0	10980	
19	F	56	59	S	0	0	12675	low
	M	54	62	S	0	0	7672	low
20	M	69	73	S	0	1	14900	low
21	F	63	62	M	2	1	25410	high
	M	67	63	S	0	0	11200	low
22	F	54	52	S	1	1	14200	low
		52	62		0	1	14980	
	M	64	60	S	0	1	13592	low
23	F	64	66	P	1	1	10512	low
		78	80	S	0	1	12840	low
	M	69	66	S	0	1	16900	high
		68	75		1	1	14060	low
24	F	52	65	M	0	1	12512	low
	M	63	71	S	0	0	12600	low
25	F	52	68	P	2	1	14512	low

Moving Selected Items

Items can be moved to different locations around the report. Select the column you wish to move.

AGE	SEX	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRA
18	M	65.5	72	S	0	0	8008	low
		65	78		0	0	10980	
19	F	56	59	S	0	0	12675	low
	M	54	62	S	0	0	7672	low
20	M	69	73	S	0	1	14900	low
21	F	63	62	M	2	1	25410	high
	M	67	63	S	0	0	11200	low
22	F	54	52	S	1	1	14200	low
		52	62		0	1	14980	
	M	64	60	S	0	1	13592	low
23	F	64	66	P	1	1	10512	low
		78	80	S	0	1	12840	low
	M	69	66	S	0	1	16900	high
		68	75		1	1	14060	low
24	F	52	65	M	0	1	12512	low
	M	63	71	S	0	0	12600	low
25	F	52	68	P	2	1	14512	low

Then select Move selected item from the pull down menu. Now select the location. And click on the destination item. The result is shown.

AGE	SEX	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRA
18	M	65.5	72	S	0	0	8008	low
19	F	56	59	S	0	0	12675	low
20	M	69	73	S	0	1	14900	low
21	F	63	62	M	2	1	25410	high
22	F	54	52	S	1	1	14200	low
		52	62		0	1	14980	
23	F	64	66	P	1	1	10512	low
		78	80	S	0	1	12840	low
24	F	52	65	M	0	1	12512	low
25	F	52	68	P	2	1	14512	low
26	M	67	74	M	1	1	8670	low
28	M	56	52	S	0	0	12050	low
30	M	56	63	P	1	1	16975	high
34	M	78	72	M	2	1	28512	high
35	M	59	57	M	2	2	10100	low
36	M	53	69	M	1	0	9870	low
		63	71	W	1	1	10520	low
38	M	69	56	M	2	1	14840	low

Summarizing The Report

We have a selection available for summarizing the report. Select Summarize information from the Edit pull down menu, then specify the destination of the summarization.

The follow screen appears to allow you to specify what will happen during summarization.

At bottom of report

Options

☐ Over line summary

☐ Double over line summary

☐ Under line summary

☐ Double under line summary

☐ Skip line after break

☐ Page after break

☐ Summarize analysis columns

☐ Suppress break value

Colors

Font background = BLACK

Data background =

Select Font

Edit Program OK Cancel

We have the ability to underline, overline, skip a line, page break, summarize the columns with statistics and suppress the left hand summarization label.

We select the following.

At bottom of report

Options

☐ Over line summary

☐ Double over line summary

☐ Under line summary

☐ Double under line summary

☐ Skip line after break

☐ Page after break

☒ Summarize analysis columns

☐ Suppress break value

Colors

Font background = BLACK

Data background =

Select Font

Edit Program OK Cancel

Click OK to see the summarization.

AGE	SEX	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRA
18	M	65.5	72	S	0	0	8008	low
19	F	56	59	S	0	0	12675	low
20	M	69	73	S	0	1	14900	low
21	F	63	62	M	2	1	25410	high
22	F	54	52	S	1	1	14200	low
		52	62		0	1	14980	
23	F	64	66	P	1	1	10512	low
		78	80	S	0	1	12840	low
24	F	52	65	M	0	1	12512	low
25	F	52	68	P	2	1	14512	low
26	M	67	74	M	1	1	8670	low
28	M	56	52	S	0	0	12050	low
30	M	56	63	P	1	1	16975	high
34	M	78	72	M	2	1	28512	high
35	M	59	57	M	2	2	10100	low
36	M	53	69	M	1	0	9870	low
		63	71	W	1	1	10520	low
38	M	69	56	M	2	1	14840	low

We have the ability to move to different pages in the report. Select View to see the options.

If we select Display page, The Display page prompt displays asking you what page you would like to go to.

Display page

Enter page number: 999

OK Cancel

We enter 999 to go to the last page of the report.

AGE	SEX	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	GRA
55	M	84	82	P	2	1	18008	high
56	M	73	69	M	2	2	45550	high
59	M	65	69	W	3	1	23023	high
63	M	65	70	M	3	1	22750	high
64	M	72	70	M	3	2	41800	high
		6960.5	7200		163	117	2191358	

CHILDID	CARE	SALARY	GRADE	WORK	DEPT	OVERTIME	CC	STATUS
2	2	33520	high	35	A		80	0001
3	2	20592	high	35	D		40	0011
2	1	25410	high	35	A		80	0051
3	1	22592	high	35	B		80	0035
2	1	13840	low	35	C	8781.81	60	0014
53	32	587177		1070		62601.1	1320	
This is the result of a line statement								
0	0	9008	low	35	A	8578.94	80	0041
0	0	10880		35	B		40	0065
0	0	7872	low	25	C	6956.3	20	0021
0	1	14900	low	35	D		80	0081
0	0	11200	low	35	F	9680.72	20	0086
0	1	13592	low	35	A	179.57	100	001
0	1	18600	high	35	C		20	0010
1	1	14080	low	35	F		80	0062
0	0	12600	low	35	C		80	006
2	1	53970	high	25	B		100	0017
1	0	13008	low	35	F		0	0045
1	1		low	35	A		40	0045

Deleting Selected Items

Items in the report can be deleted. Select the item you wish to delete.

CHILDID	CARE	SALARY	GRADE	WORK	DEPT	OVERTIME	CC	STATUS
0	0	9008	low	35	A	8578.94	80	0041
1	25410	high	35	A			20	0052
1	14300	low	35	A			80	0086

Select Edit from the pull down menus and Delete selected item. The item is removed.

Subsetting The Report

The report has the ability to subset the data as needed. Given the following report,

CHILDID	CARE	SALARY	GRADE	WORK	DEPT	OVERTIME	CC	STATUS
35	A	8578.94	60	0041	2500	Dave Derry		
35	A		20	0052	2500	Jane Pendlebury		
35	A		80	0086	2500	Norman Marlow		

select Search to display the Where... selection. After selecting Where..., the following prompt appears.

Where

Enter where clause:

OK Cancel

Enter a where clause to subset the data.

Where

Enter where clause: gender = 'F'

OK Cancel

Select OK when finished and the report is subsetted.

AGE	GENDER	HEIGHT	WEIGHT	STATUS	CHILDID	CARE	SALARY	WORK
21	F	60	62	M	2	1	25410	35
22	F	54	52	S	1	1	14200	35
28	F	56	52	S	0	0	12050	35
30	F	56	63	P	1	1	16975	35
36	F	63	71	W	1	1	10520	35
43	F	62	73	M	2	0	13840	35
55	F	87	71	M	2	1	14840	25
57	F	53	62	M	2	2	33520	35
61	F	55	62	M	2	1	25410	35
22	F	52	62	S	0	1	14990	35
24	F	52	65	M	0	1	12512	35
25	F	52	68	P	2	1	14512	35
26	F	87	74	M	1	1	8670	35
45	F	82.5	72	M	1	1	15410	35
48	F	65	66	M	2	1	15840	35
51	F	67	68	M	5	0	22760	35
61	F	57	69	M	3	1	22592	35
23	F	84	88	P	1	1	10512	35
85	F	87	81	M	2	1	13840	35
23	F	78	80	S	0	1	12840	35

The Where clause can be augmented. From the pull-down menus, select Search, and try the Where also... selection.

The following screen appears. Select the following.

Where also

Enter where also clause: status='S'

OK Cancel

Select OK when finished to see the resulting report.

AGE	GENDER	HEIGHT	WEIGHT	STATUS	CHILDID	CARE	SALARY	WORK
22	F	54	52	S	1	1	14200	35
28	F	56	52	S	0	0	12050	35
22	F	52	62	S	0	1	14990	35
23	F	78	80	S	0	1	12840	35
25	F	58	54	S	0	1	13085	35
19	F	55	59	S	0	0	12675	35

Where selections can be removed one at a time when you select, from the pull-down menu Undo last where.

AGE	GENDER	HEIGHT	WEIGHT	STATUS	CHILDID	CARE	SALARY	WORK
21	F	60	62	M	2	1	25410	35
22	F	54	52	S	1	1	14200	35
28	F	56	52	S	0	0	12050	35
30	F	56	63	P	1	1	16975	35
36	F	63	71	W	1	1	10520	35
43	F	62	73	M	2	0	13840	35
55	F	87	71	M	2	1	14840	25
57	F	53	62	M	2	2	33520	35
61	F	55	62	M	2	1	25410	35
22	F	52	62	S	0	1	14990	35
24	F	52	65	M	0	1	12512	35
25	F	52	68	P	2	1	14512	35
26	F	87	74	M	1	1	8670	35
45	F	82.5	72	M	1	1	15410	35
48	F	65	66	M	2	1	15840	35
51	F	67	68	M	5	0	22760	35
61	F	57	69	M	3	1	22592	35
23	F	84	88	P	1	1	10512	35
85	F	87	81	M	2	1	13840	35
23	F	78	80	S	0	1	12840	35

Moving Through The Report

We have the ability to go to different pages in the report. From the Pull-down menus, select View and this menu appears.

View

Display next page of report

Display previous page of report

Display page...

Display page allows you to go to a specify page.

Display page

Enter page number: 2

OK Cancel

Select **OK** to see the page.

AGE	GENDER	HEIGHT	WEIGHT	STATUS	CHILDREN	CARS	SALARY	HOURS	DEPT
46	F	63	76	W	3	1	47520	35	
56	F	52	60	M	3	2	47520	25	
19	F	56	58	S	0	0	12675	35	
35	F	59	57	M	2	2	10100	25	
52	F	66	69	M	5		23760	35	

Alternatively, to see the next page, select Display next page of report.

ADVANCED FSREPORT TOPICS

Accessing The Code

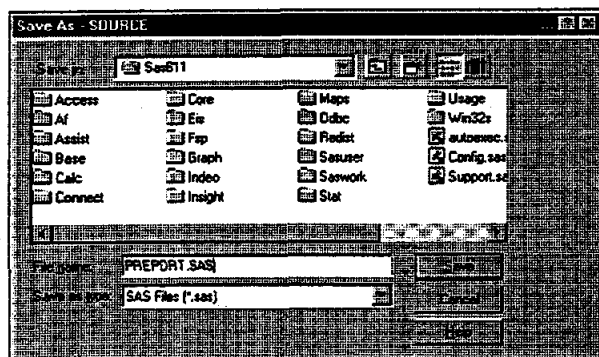
After creating the report by making these selections, we have the ability to see the actual statements being created. Select Locals, List REPORT statements, to see the actual code.

```

00001 PROC REPORT DATA=SAVED.DEMOGIUS LS=256 PS=28 SPLIT='/' CENTER ;
00002 COLUMN AGE GENDER HEIGHT WEIGHT STATUS CHILDREN CARS SALARY HOURS DEPT
00003 OVERTIME CC STAFFNO BUDGET NAME;
00004
00005 DEFINE AGE / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "AGE";
00006 DEFINE GENDER / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "GENDER";
00007 DEFINE HEIGHT / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "HEIGHT";
00008 DEFINE WEIGHT / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "WEIGHT";
00009 DEFINE STATUS / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "STATUS";
00010 DEFINE CHILDREN / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CHIL";
00011 DEFINE CARS / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CARS";
00012 DEFINE SALARY / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "SALARY";
00013 DEFINE HOURS / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "HOURS";
00014 DEFINE DEPT / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "DEPT";
00015 DEFINE OVERTIME / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "OVER";
00016 DEFINE CC / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CC";
00017 DEFINE STAFFNO / DISPLAY FORMAT= $14. WIDTH=14 SPACING=2 LEFT "STAF";
00018 DEFINE BUDGET / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "BUDGET";
00019 DEFINE NAME / DISPLAY FORMAT= $20. WIDTH=20 SPACING=2 LEFT "NAME";
00020
00021
00022 RUN;
  
```

Once the code is displayed, we can save it to a text file or catalog entry. Select File, Save as and specify the location. In this example, we specify an external text file.

The directory window appears.



We select a location of PREPORT.SAS and click on **Save**.

To use the code in the program editor, select Windows, PROGRAM EDITOR.

Issue an include command similar to the following.

```

Command ----> INC 'C:\SAS611\PREPORT.SAS'
0001
0002
0003
  
```

The program appears and is available for editing and submission.

```

00001 PROC REPORT DATA=SAVED.DEMOGIUS LS=256 PS=28 SPLIT='/' CENTER ;
00002 COLUMN AGE GENDER HEIGHT WEIGHT STATUS CHILDREN CARS SALARY HOURS DEPT
00003 OVERTIME CC STAFFNO BUDGET NAME;
00004
00005 DEFINE AGE / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "AGE";
00006 DEFINE GENDER / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "GENDER";
00007 DEFINE HEIGHT / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "HEIGHT";
00008 DEFINE WEIGHT / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "WEIGHT";
00009 DEFINE STATUS / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "STATUS";
00010 DEFINE CHILDREN / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CHIL";
00011 DEFINE CARS / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CARS";
00012 DEFINE SALARY / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "SALARY";
00013 DEFINE HOURS / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "HOURS";
00014 DEFINE DEPT / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "DEPT";
00015 DEFINE OVERTIME / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "OVER";
00016 DEFINE CC / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CC";
00017 DEFINE STAFFNO / DISPLAY FORMAT= $14. WIDTH=14 SPACING=2 LEFT "STAF";
00018 DEFINE BUDGET / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "BUDGET";
00019 DEFINE NAME / DISPLAY FORMAT= $20. WIDTH=20 SPACING=2 LEFT "NAME";
00020
00021
00022 RUN;
  
```

An alternative way of capturing the code to bring it into the Program Editor is by highlighting it in the Source Window.

Select the copy button , or equivalent, to copy it to the clipboard. Return to the PROGRAM EDITOR by pulling down the Windows menu and selecting PROGRAM EDITOR.

Select the paste button  and the code is placed in the Program Editor.

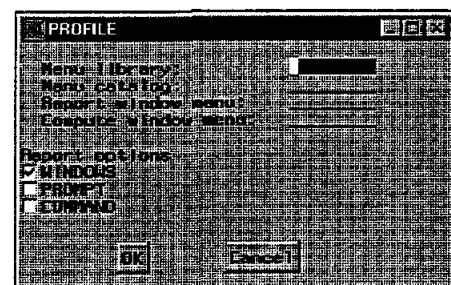
```

00001 PROC REPORT DATA=SAVED.DEMOGIUS LS=256 PS=28 SPLIT='/' CENTER ;
00002 COLUMN AGE GENDER HEIGHT WEIGHT STATUS CHILDREN CARS SALARY HOURS DEPT
00003 OVERTIME CC STAFFNO BUDGET NAME;
00004
00005 DEFINE AGE / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "AGE";
00006 DEFINE GENDER / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "GENDER";
00007 DEFINE HEIGHT / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "HEIGHT";
00008 DEFINE WEIGHT / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "WEIGHT";
00009 DEFINE STATUS / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "STATUS";
00010 DEFINE CHILDREN / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CHIL";
00011 DEFINE CARS / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CARS";
00012 DEFINE SALARY / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "SALARY";
00013 DEFINE HOURS / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "HOURS";
00014 DEFINE DEPT / DISPLAY FORMAT= $8. WIDTH=8 SPACING=2 LEFT "DEPT";
00015 DEFINE OVERTIME / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "OVER";
00016 DEFINE CC / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "CC";
00017 DEFINE STAFFNO / DISPLAY FORMAT= $14. WIDTH=14 SPACING=2 LEFT "STAF";
00018 DEFINE BUDGET / SUM FORMAT= BEST9. WIDTH=9 SPACING=2 RIGHT "BUDGET";
00019 DEFINE NAME / DISPLAY FORMAT= $20. WIDTH=20 SPACING=2 LEFT "NAME";
  
```

Changing The REPORT Profile

Another option from the Locals menu is Display REPORT profile.

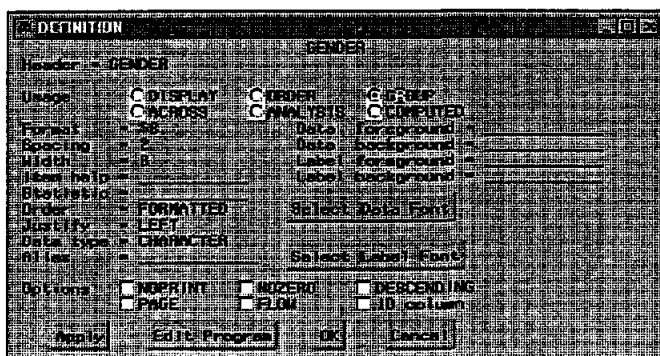
This allows you to specify Prompting, Windows or Command line, and the location of the currently used profile. This allows us to use this report facility in a customized fashion. Select **OK** when finished.



Exploring Data

It is possible to use the report to group data and then drill down through the grouped values. Let's assign a variable as a usage of Group. Select GENDER.

Select Edit, Define selected item. Then, the Definition window is displayed. Specify the usage of GROUP.



beginning tutorials

Hit OK to see the grouped report.

AGE	STATUS	SALARY	GENDER	COUNT	COUNT
50	D	8000	F	2	1
50		20000	M	5	2
50	M	121600	F	29	19
25		128300	M	20	18
86	S	43000	F	0	2
83		17800	M	0	2
23	SEP	18000	F	1	1
55		12000	M	2	1
46	W	30000	F	3	1

Now select **Edit, Explore data**. The following prompting window appears to allow you to select the values you want.

You can specify specific values of grouped columns or **All levels**.

We will select **GENDER** of **F** and **STATUS** of **D, M, SEP**.

The EXPLORE dialog box has three sections: 'Remove Column', 'Select values to include in report', and 'Remove Column'. Under 'Remove Column', 'GENDER' is selected. Under 'Select values to include in report', 'STATUS' is selected. Under 'Remove Column', 'All levels' is selected. The 'Apply' button is highlighted.

Select **OK** to see the following report.

AGE	STATUS	SALARY	GENDER	COUNT	COUNT
50	F	8000	D	2	1
50		121600	M	29	19
23		18000	SEP	1	1

The EXPLORE dialog box has three sections: 'Remove Column', 'Select values to include in report', and 'Remove Column'. Under 'Remove Column', 'GENDER' is selected. Under 'Select values to include in report', 'STATUS' is selected. Under 'Remove Column', 'All levels' is selected. The 'Apply' button is highlighted.

Going back to **Explore data** allows us to modify it again.

The window reappears.

The EXPLORE dialog box has three sections: 'Remove Column', 'Select values to include in report', and 'Remove Column'. Under 'Remove Column', 'GENDER' is selected. Under 'Select values to include in report', 'STATUS' is selected. Under 'Remove Column', 'All levels' is selected. The 'Apply' button is highlighted.

Select **Rotate columns** to change the order of column appearance.

The EXPLORE dialog box has three sections: 'Remove Column', 'Select values to include in report', and 'Remove Column'. Under 'Remove Column', 'GENDER' is selected. Under 'Select values to include in report', 'STATUS' is selected. Under 'Remove Column', 'All levels' is selected. The 'Apply' button is highlighted.

Hit **OK** to see the following reordered report.

AGE	STATUS	SALARY	GENDER	COUNT	COUNT
50	D	8000	F	2	1
50	M	121600	F	29	19
23	SEP	18000	F	1	1