

Steps for Creating a SAS Datasets			Scope
1	LIBNAME libref '<Path>;	Reference a SAS data library	Global
2	FILENAME fileref '<Path>;	Reference (Temp) an external file	Global
3	DATA 'SASDataSetName';	Name a SAS data set	
4	INFILE 'file name/fileref' OBS=10;	Identify an external file using INFILE statement OBS mention the <i>range till which data needs to be read</i> . Can be used in data and proc print. Used to <i>verify Data</i> reading without affecting RAM space much.	
5	INPUT <informats>;	Describe data	
6	RUN;	Execute the DATA step	
7	PROC PRINT Data=<DS>;	List the data	
8	RUN;	Execute the final program step	

Column Style: [Standard Data + Well Ordered in Column]

1-----10-----20-----30-----40-----50-----60-----70-----80-----90

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PROC PRINT DATA=DATASETNAME		Scope
NOOBS *used to avoid printing observation column while printing;		
DOUBLE *print double spacing in SAS Output and not in SAS Report;		
Sum <Col Name>;	Calculate the sum of the column	Local
VAR <Col Name>;	Mention the variable and its <u>order</u> of printing	Local
Label <Col Name>="";	Define label name for a column Can mention up to 256 char Can be defined in single or multiple lines	Local
Where <column condi> CONTAINS 'str'; ? 'str'; IN ('str1','str2');	Defines the column condition =, ^, >, <, >=, <= CONTAINS is string comparison AND, OR operator used along with col name each time IN operator is used as SQL style in comparison.	Local
ID <Col Names>;	Act as a primary key, replace OBS column without explicitly mention of NOOBS. ID used along with Var will display a column twice .	Local
SUM <Col Name>;	Will provide the total of the column specified.	Local
BY <Col Name>;	Col Name should be same as one that is sorted before using this. Subset results .	Local
BY <Col Name1>; ID <Col Name1>;	When ID used along with BY it will: 1. Supress OBS column 2. ID/BY variable name is printed in left col 3. Each ID/BY value is printed only once at the start of each by group and on the line, that has group sub-total.	Local
By <Col Name1>; PAGEBY <Col Name1>;	Mostly used along with sum-by-id. Column used in PAGEBY should be same as one used in BY. Used to print each sub-total on a separate page .	Local
FORMAT <Col Name>;	When defined inside PROC it scopes within it . To make it permanent FORMAT or Labels need to be defined in DATA step	Local/Global
TITLE 'str1';	Generally, need to be defined outside a PROC step . However, it can be used inside PROC too TITLE is global . Once defined will stay forever until title statement is modified, cancelled or end SAS session. Cancel of title is done by title ;	Global
FOOTNOTE 'str2';	Used to print note below a table/graph It is same as TITLE function, up to 10 footnotes can be defined in SAS. Cancel of footnote is done by: Footnote ;	Global

PROC SORT DATA=DATASETNAME OUT=DATASETNAME *o/p SAS dataset		
by <Col Name>; by descending <col1>	Sorted by the column mentioned, sort takes place from right to left columns mentioned. If used with descending it will apply to column which is immediately after it , rest of the other columns will be sorted in ascending order.	Local
NOTSORTED;	To explicitly mention not to sort if the values are equal based on by condition.	Local

PROC FORMAT LIB=library			Scope
LIBRARY/LIB *Defines the SAS library that needs to be referred; FMTLIB *print all the user defined format present in the Library mentioned;			
1	LIBNAME <i>library</i> '<Path>;	Reference a SAS data library	Permanent
2	PROC FORMAT LIB=library FMTLIB;	Library can be the SAS library referred above or it can be a catalog like <i>library.catalog</i> . FMTLIB will list all the user defined format present in the library. <i>formats.sas7bcat</i> file is created in the path mentioned in library.	Permanent
3	Value <format-name>	Format name must begin with \$ for Char var Cannot be > 8 char in length Cannot be the name of existing SAS format Cannot end with a number Does not end with a period when defined	Permanent
	Range1='label1'	Range1= Actual Column Data Label1= Description of Range1 Numeric => 102='Manager' Character => 'A'='Good Performance' Range => low-<12='Not Teen Age'	Permanent
	Range2='label2';	Always the last Range must be ended with; which implies SAS that PROC FORMAT statement ends.	Permanent
4	PROC FORMAT;	This format will be created in the <i>work directory</i> which <i>means temporary</i> .	Temporary
	Value <format-name>	Scope within that SAS session only	Temporary
	Range1='label1'	Scope within that SAS session only	Temporary
	Range2='label2';	Scope within that SAS session only	Temporary
5	PROC CATALOG;	You can delete the user defined format	Permanent