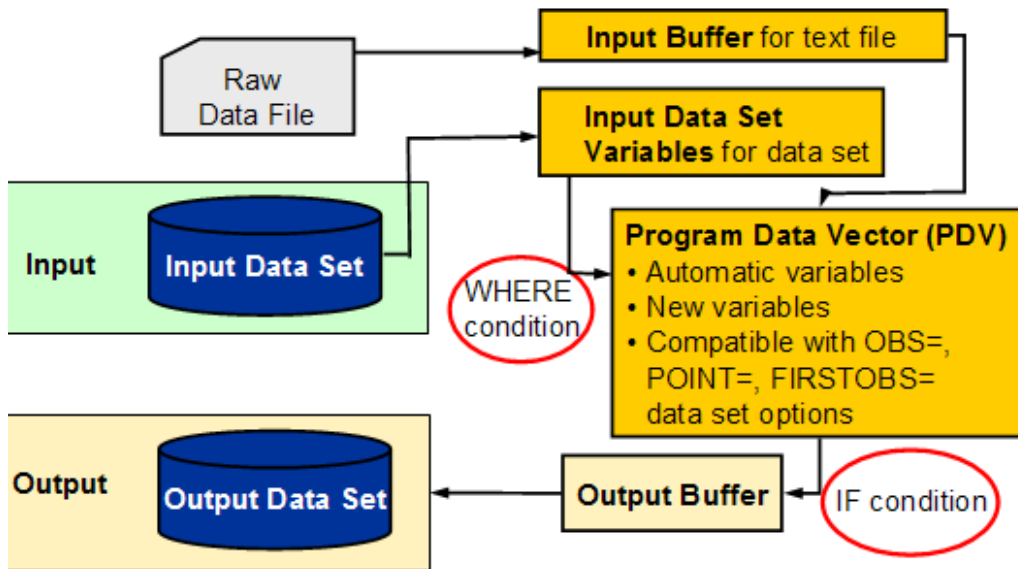# SAS Technical Tip - Where vs. If: Differences in how and when to apply

Differences between WHERE and IF conditions to subset data sets   **(SAS Skills Book pages 67, 88)**

Subset Data set	WHERE	IF
(No Difference between WHERE and IF Conditions)		
Using variables in data set	X	X
Using SET, MERGE or UPDATE statement in DATA step*	X	X
(Must use IF Condition)		
Accessing raw data file using INPUT statement		X
Using automatic variables such as _N_		X
Using newly created variables in data set		X
In combination with data set options such as OBS =**, POINT = , FIRSTOBS =		X
To conditionally execute statement		X
(Must use WHERE Condition)		
Using special operators*** such as LIKE or CONTAINS	X	
Directly using any SAS Procedure	X	
More efficiently****	X	
Using index, if available	X	
When subsetting as a data set option	X	
When subsetting using Proc SQL	X	
(Be careful which you use!)		
When merging data sets*****	**SUBSET *BEFORE* MERGING**	**SUBSET *AFTER* MERGING**

See * to **** footnotes in SAS Tip: FAQ (http://support.sas.com/techsup/faq/)

***** IF statement to subset the final data set after merging data sets is generally preferred.

Source: Sharpening Your SAS Skills, CRC Press (www.sas.com), April 2005