# **PROC SQL NOTES**

## **TERMINOLOGY**

The difference between SAS and SQL terminology is shown in the table below.

Table
Row
Column

### **PROCSQL NOTES**

**PROC SQL:** calls the SQL procedure

**SELECT:** specifies the column(s) (variables) to be selected **FROM:** specifies the table(s) (data sets) to be queried

WHERE: subsets the data based on a condition

**GROUP BY:** classifies the data into groups based on the specified column(s) **ORDER BY:** sorts the resulting rows (observations) by the specified column(s)

**QUIT:** ends the PROC SQL procedure

## **SAS VS SQL FUNCTIONS**

Functions	SAS	PROC SQL
Drop columns	DROP	SELECT
Rename column	RENAME	AS
Add rows	OUTPUT	INSERT INTO
Delete rows	WHERE / IF THEN DELETE	DELETE FROM and WHERE
Delete duplicate rows	NODUPLICATE	DISTINCT
Create a table	DATA	CREATE TABLE
Sorting	PROC SORT	ORDER BY
Summarize Data	PROC SUMMARY /FIRST. LAST.	GROUP BY
Conditional Statements	IF- THEN Statements	CASE-WHEN
Displaying output	PROC PRINT	SELECT

# SUMMARY FUNCTIONS IN SQL

- 1. AVG/MEAN
- 2. COUNT/FREQ/N
- 3. SUM
- 4. MAX
- 5. MIN
- 6. NMISS
- 7. STD
- 8. VAR
- 9. T (T VALUE)
- 10. USS (UNCORRELATED SUM OF SQUARE)
- 11. CSS (CORRELATED SUM OF SQUARE)
- 12. RANGE