

SAS to R Cheat Sheet

General Syntax

SAS: DATA work.ds; SET input; RUN;

R: df <- input %>% ...

SAS: PROC SORT DATA=ds; BY var;

R: df <- df %>% arrange(var)

DATA Step Logic

SAS: IF A = 1 THEN X = 0;

R: mutate(X = if_else(A == 1, 0, X))

SAS: RETAIN x;

R: df <- df %>% mutate(x = lag(x))

Filtering and Selecting

SAS: IF SEX = 'F';

R: filter(SEX == 'F')

SAS: KEEP ID AGE;

R: select(ID, AGE)

Grouping and Summary

SAS: PROC MEANS; BY TRT;

R: group_by(TRT) %>% summarise(...)

SAS: PROC FREQ; TABLES TRT*SEX;

R: count(TRT, SEX)

Joins

SAS: MERGE A B; BY ID;

R: left_join(A, B, by = 'ID')

SAS: PROC SQL JOIN

R: inner_join(), full_join(), etc.

Date/Time Handling

SAS: DATEPART(DT);

R: as.Date(DT)

SAS: TODAY();

R: Sys.Date()

Functions and Loops

SAS: DO i = 1 TO 10;

R: for (i in 1:10) { ... }

SAS: ARRAY vals{3} A B C;

R: mutate(across(c(A, B, C), ...))

AI and QC Enhancements

SAS: *Manual QC*

R: validate_with_chatgpt('Header text')

SAS: No integrated AI

R: Use Copilot or ChatGPT via API