How do I debug SAS DATA step?

Chris Hemedinger, SAS User Engagement
SAS programmers deserve a debugger

Bring your debugging to the next level

```sas
data tokens;
  infile inf tok dlm=',';
  length region $ 4 role $ 20 value $50;
  input region role value;
  /* if only I didn't need PUT */
  /* statements to peek at these */
  put value= role= region=;
run;
```
Introducing: the DATA step debugger

With all of the must-have features

- Set breakpoints
- Examine & watch variables
- Set variable values
- Jump or go to lines to execute
- Calculate values
- Show environment information
- Show everything in PDV
In your favorite tools

- SAS Enterprise Guide
- SAS Studio
- SAS Display Manager
How to begin

Enable Debug in program editor, then click “bug” or shortcut key
Extra notes about DATA step debugger

- Cannot use to debug DATALINES (or CARDS) steps
- Cannot use the debugger in a SAS macro setting
- DATA step only – not other SAS procedures
- Does not show: hash object and temporary arrays (not in PDV)
- There is a separate “SAS Code Debugger” that supports PROC FCMP, PROC COMPILER, PROC HPRISK
Learn more

• Using the DATA step debugger in SAS Enterprise Guide (blog)
• SAS hash object debugging tips (SAS Communities)
• DATA step debugger basics (BASUG webinar)
• Debugging the difference between WHERE and IF (blog)
• Using the DATA step debugger in SAS Studio (doc)