# SAS Good Programming Checklist

Reference: <https://advance.phuse.global/display/WEL/Good+Programming+Practice+Guidance>

* Make backup copy of program before updates
* Use program documentation
  + E.g. use headers and comments
  + Write documentation in English
  + Inbed comment with the body of the program code should detail modular flow
* Write only one statement per line
* Use indentation to arrange the code clearly
* Use unique names for dataset and files within the program/macro
* Reference datasets and files explicitly in each data step and procedure
* Reset global options to original settings if changed in the program/macro
* Delete temporary dataset after program execution
* Use run/quit at the end of each data step/procedure
* Use defensive coding
* Optimize the data, do not re-read data
* Do not hardcode data
* Do not manually edit output
* Do not overwrite input data
* Do not use SAS keywords for dataset and variable names
* Always include a final else/otherwise clause in select/if/case statement