Simple Exercise for Using NetCDF

Note: Things that you should type are in the **`computer boldface`** font.

1. If you haven't already, install NetCDF, using the instructions in the document "Building NetCDF."
2. From the directory from which you built NetCDF, go into the subdirectory named `examples`:

   `cd examples`

3. Choose your preferred programming language (among those available) and go into that directory; for example:

   `cd C`

4. Create a subdirectory of your home directory named `Original`:

   `mkdir Original`

5. Copy all of the source files into that new directory, so that you have the originals to refer back to, just in case; for example:

   `cp *.c Original`

6. Using your preferred text editor (for example, `vi`, `emacs`, `nano`), edit `simple_xy_wr.c` to add more metadata (data that describe your data), specifically to add a text string ***attribute*** with your name to the output file, with the attribute name of "Creator Name." **You will need to read through the NetCDF documentation to learn how to do this.**
7. Specifically, on the NetCDF website, look for the link to "Full NetCDF Documentation," then pick the "Interface Guide" for your preferred programming language, then look for "Attributes," and you're going to "put" your Creator Name attribute, which is ASCII text, into the file.
8. Also, the Creator Name attribute should be **global**, (i.e., true for the entire file, not just for a specific variable), so the variable ID should be `NC_GLOBAL`.
9. And in your modified source code, you **MUST** place the writing of the Creator Name attribute **after** the call to `nc_create` but **before** the call to `nc_enddef`.
10. Once you've edited your source file, compile, linking to the NetCDF library:

    `make simple_xy_wr`

11. Run the test program:

    `./simple_xy_wr`

12. You can examine the contents of the output file using the `ncdump` utility:

    `../../bin/ncdump simple_xy.nc`

13. Make a similar modification to `simple_xy_rd.c`, to read the new global attributed, and be sure to output the result from inside the source code, just as a check.
14. Then make, then run.