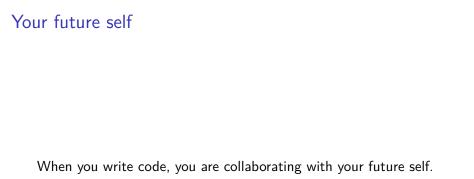
# Writing Neat Code

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# Reproducible Code

- Use set.seed() for random processes
- Don't ever make changes to primary data
- Maintain a clear record of what you do

#### Reusable Code

- ▶ Include enough generality that you can reuse code
- Use generic, consistent variable names
- Use functions and loops
- Vectorize calculations

### Comments

- ▶ Add a short description at the top of the file
- Label sections of code
- Maintain dialog of what you are doing

### Use space

- Use tidyverse
- ▶ Use %>%
- Avoid packing too many things into one command
- Leave white space between lines
- Indent consistently

## Use multiple files

- ▶ Good things to put in a separate file
  - ▶ Any descrete chunk of code that gets too long
  - Functions

# When Sharing

Code should be copy/pasteable

```
# bad code
> dat <- data_frame(x = rnorm(100),
+ y = x + rnorm(100))</pre>
```

#### Error: unexpected '>' in ">"

# Loading libraries

- ► Either load all libraries at the top of the file
- ▶ Or include a comment on what libraries are required