Easier Components

Difficult Components

DATA PROCESSING FUNCTIONS (DPF)

1. Select Specific Columns Area\_name (rename as area\_name), STCOU, and any column ending in “D”.
2. Convert data into long-format; one row contains a single Area\_name value.
3. Analyze strings to pull out year and convert to 4 digit numeric. Same step, collect first 3 of string and four digit year to create a new var.
4. Create two datasets; split by county level data. (Ex. Code provided)
5. Create new var in county tibble.
6. Create new var in non-county tibble.

COMBINING DATA FUNCTIONS (CDF)

1. Write function that does 1 & 2 in DPF stage.
2. Write function that performs 2 to 3 in DPF stage.
3. Write function for step 5.
4. Write function for step 6.
5. Write function for output 3,5,6 that returns two tibbles
6. Wrap it all into one function that runs everything on one init.
7. Call function twice for each .csv file provided.
8. Write one single function that combines the tibbles into a single data frame.

GENERIC FUNCTIONS (GF)

1. Write function that plots mean across years by division.
2. Plot function itemized list; spec state, determine top/bottom, how many.
3. Finalize Plot Function with additional asks.

PUTTING IT ALL TOGETHER (PIAT)

1. Run data proc function on URL data, declare renamed var.
2. Run data comb. Function that puts both data in one object with two frames.
3. Plot on **State**
4. Plot on **County**
   1. **NC**
   2. **SC**
   3. **Nothing**
   4. **PA**
5. Read in additional datasets; apply functions to them.
   1. Run data processing function on the four data sets
   2. Run data comb function to combine into one object with two data frames
   3. Plot on **State**
   4. Plot on **County**
      1. **CA**
      2. **TX**
      3. **Nothing**
      4. **NY**

FINALIZING

* Functioning Webpage with our work as a final product. Should include all the task points above plus a narrative.
* For each item in the rubric, your grade will be lowered one level for each error (syntax, logical, or other) in the code and for each required item that is missing or lacking a description.
* We want to use Good Programming Practices when coding
  + Include a header at the top of the program that gives the author, date, and purpose of the program.
  + Place comments throughout the program explaining the purpose of different chunks of code as well as your thought process.
  + Spacing and indentation should be used throughout for readability of the program.
  + Group sections of your code that serve a certain purpose together.
  + Use a consistent naming scheme such as camelCase or underscores\_between\_words.

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Description automatically generated