DSCI 1000: Assignment 1

YOUR NAME HERE

THE DATE HERE

As covered in class, `.Rmd` files will be the only file format we work in this class. `.Rmd` files contain three basic elements:

1. Script that can be interpreted by R. These are called "chunks."
2. Output generated by R, including tables and figures.
3. Text that can be read by humans.

From a `.Rmd` file you can generate – called "knitting" – html documents, pdf documents, word documents, slides . . . lots of stuff. All class notes will be in `.Rmd` (along with a knitted HTML or PDF version) and all assignments will require both the `.Rmd` file and the knitted output. (Here we have chosen `html_document` but changing the above header to `output: pdf_document` would produce a PDF.)

This assignment will require you to create an *.Rmd file, load some data, and do some of the manipulations we did in class. As we noted, the assignments will start easy and get progressively more difficult.

1. Load all of the packages that you will need into the code chunk above this text. For this assignment, we want to use the `tidyverse` library so load that in the chunk below. For this class you should always load every library in the very first code chunk. We put a comment `#` where that should occur. For all assignments in this class you should follow the same practice. All needed libraries should be loaded here. This is where we will check to ensure that everything was loaded in the Markdown document so the libraries must be loaded here to get full credit.

```
# LOAD LIBRARY HERE
```

2. Save this document as "LASTNAME_FIRSTINITIAL_ASSIGNMENT1" – it should add the `*.Rmd` prefix automatically.
3. Using code, load in the student college debt data `sc_debt.Rds` into a new tibble object called `debt` in the commented space.

```
# INSERT CODE FOR LOADING IN THE DATA HERE
```

4. Using the object `debt` summarize a variable of your choice using whatever summary function you want. Describe, *in words*, what you did and what the results are telling you. Note that all explanations, discussions, and interpretations should occur outside of the code chunk. Chunks contain code (and comments about the code), text should be presented outside of the chunk. The whole point of Markdown is to combine coding and text!

```
# INSERT CODE THAT SUMMARIZES A VARIABLE HERE
```

5. Finally, "Knit" the document by clicking on the "Knot" icon to create an HTML file. Submit both the *.RMD file you used to create the file and the HTML file. As noted above, given course naming conventions these should be: `LASTNAME_FIRSTINITIAL_Assignment1.Rmd` and `LASTNAME_FIRSTINITIAL_Assignment1.HTML`.

Grading: There are 5 points possible, one for each question. Each question will be graded "Complete" (1) or "Incomplete" (0).