

## Assignment 1. Github and Rstudio: Hello World

.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.
2. Output generated by R, including tables and figures.
3. Text that can be read by humans.

From a .Rmd file you can generate html documents, pdf documents, word documents, slides . . . lots of stuff. All class notes will be in .Rmd. All assignments will be turned in as .Rmd files **AND .html** (or other knitr result), and your final project? You guessed it, .Rmd **AND .html**. To create an html file you will need to “knit” your Rmd file (*We will discuss this in class, but feel free to read ahead*).

For your first assignment, I want you to create a file called **01-assignment\_<lastname>.Rmd** in your github repo in the assignments folder. **YOU MUST ALSO SUBMIT IN THE COURSEROOM.** It should contain the following elements:

1. A sentence that says “Hello, World”
2. R output that summarizes the variables in the **college.Rdata** Dataset

Submit it under assignment 1, using the format **01-assignment\_<lastname>.Rmd**. All assignments should be turned in using this format. Since my last name is Doyle, I would use **01-assignment\_doyle.Rmd** as my file name. Unless your name is also Doyle, you should use a different name.

R output that summarizes the college.Rdata should include:

1. Calculate the average earnings for individuals at the most selective colleges, then compare that with individuals at the least selective colleges in the dataset.
2. Find a way to determine whether colleges with very high SAT scores tend to be larger or smaller than colleges with low SAT scores.
3. Plot the relationship between cost and debt. What do you see? Does this surprise you?
4. Now, provide separate plots for cost and debt by control of the institution.