# Assignment 0: Intro to R and Github

This lab is to be done in groups of two only.

**Description**

This is an individual assignment. No group work.

For this course, you are going to complete the exercises in the document "[A (very) short introduction to R](https://cran.r-project.org/doc/contrib/Torfs+Brauer-Short-R-Intro.pdf)", and publish the report and the code to go with it, on github. If you read the document, you will find a good introduction to the R programming language, including some examples.

The document in question has 14 different "Todo" sections throughout. You must write the code to demonstrate each Todo, and include it in a document as described below.

Additionally, you must complete one final Todo of my own making, as follows:

**Todo**

The final Todo in the document has a footnote. Write code that will prove that footnote true

**You will use knitr to generate a pdf file showing your code, and the answers (charts and/or data)**

**Resource:**

[How to present your data science portfolio on Github](https://www.dataquest.io/blog/how-to-share-data-science-portfolio/)

**The Documents**

**You must create a Rmd document *in correct Rmd format* using knitr**, as described in the following:

* [R Markdown — Dynamic Documents for R](http://rmarkdown.rstudio.com/)(large resource)
* [Writing reproducible reports in R with markdown, knitr and pandoc](http://nicercode.github.io/guides/reports/)
* [Markdown](http://kbroman.org/knitr_knutshell/pages/markdown.html)
* [knitr with R Markdown](http://kbroman.org/knitr_knutshell/pages/Rmarkdown.html)
* [R markdown cheatsheet](https://www.rstudio.com/wp-content/uploads/2015/02/rmarkdown-cheatsheet.pdf)

This document must show the following:

* The user name you used for your github account.
* A short introduction, describing the assignment
* a link to the document we are using
* the code you used to complete the Todo, plus the result of running the code. (use knitr code to produce this)
* Acknowledgements of any sources you used to complete the assignment, including those I have mentioned here.
* **The document *must* be named SRT411A0.Rmd.**
* **The Rmd document must show the results of your code.**

You **MUST** also generate a pdf file showing the results of your code, generated with the knitr command.

**Your Submission**

**WARNING: If you do not follow these guidelines *exactly*, you will receive zero for this assignment. I will not mark assignments that do not follow these guidelines *exactly*.**

You must create your own [Github](https://github.com/) account, make a repository entitled "SRT411 Assignment 0" and push your code and documentation to that repository.

The following files must be present and correct:

* a readme file describing this assignment, including an attribution to the original assignment file
* the Rmd file
* the pdf

While the tutorials on Github should be enough, there are Github tutorials in Lynda if you need more instruction.

Once finished, you must **upload to Blackboard a plain unformatted text file which contains the name you used for your Github account, and a html link to the repository for this assignment**.

**Relative Links**

* knitr\_example.Rmdfile – the file is attached with this instruction document in Course Web -> Assignments -> Assignment 0
* [The Tidy Data Project](https://github.com/cyberis/TidyDataProject)