# Data Visualization: Pre-Class Assignment

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### Required Steps to Install R

This file has instructions for getting set up in R before class starts.[1] Complete these steps before the first class.

1. Install R

   - Go to https://cran.rstudio.com/
   - Choose the "base'' subdirectory
   - The website should choose the appropriate version for your computer
   - Download
   - Open downloaded .exe file and run
   - Install, accepting defaults

2. Install R Studio

   - R Studio is an interface for R
   - go to https://www.rstudio.com/products/rstudio/download/#download
   - Download RStudio Desktop
   - Open downloaded .exe file and run
   - Install, accepting defaults

3. Make sure you can open R Studio

   - If you can't open the program, go get help from CCAS's OTS
   - You don't need to do more than open at this point

4. Quit R Studio

You are now ready to come to class.

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### Optional Steps to Install R Markdown

The remaining steps are **optional**. R Markdown is a R package that creates a link between R and Tex, is a document preparation program that is very good for typesetting math and code. I produced this document via a R Markdown file.

R Markdown may be very useful to you to write your problem sets, showing both R code and R output. I use it to produce class tutorials and slides on R programming.

However, R Markdown is also **very** buggy, and some students have struggled to install it. It is also another layer of coding that you may not want to bother to learn. Bottom line: download and use if it seems useful to you and if you're not feeling overwhelmed. If you find this too much or too buggy, please ignore.

5. Install MikTex or MacTex

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[1]With many thanks to the authors of this helpful website: http://www.reed.edu/data-at-reed/software/R/r_studio_pc.html

- This is a program that you need to have running in the background so you can make nice pdfs
- For PCs
  - Go to https://miktex.org/2.9/setup
  - Choose the appropriate version and download
  - Open downloaded .exe file and run
  - Install, accepting defaults
- For Macs
  - Go to http://tug.org/cgi-bin/mactex-download/MacTeX.pkg
  - Choose the appropriate version and download
  - Install, accepting defaults. This is a big file and may take awhile

6. Install R Markdown

- Open R Studio
- At the prompt type

```
install.packages("rmarkdown")
```

- You should see a lot of output and no red complaints