A Sample R Markdown Template

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Abstract

The objective of this document's template is to demonstrate some basics of the combination of R and markdown and how they can be knitted together using the knitr package (via the RStudio IDE) to produce beautiful docs/reports.

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The options mentioned in the header of this Rmarkdown file (with an extension of .Rmd) above for a pdf document can be modified as well as supplemented by options for other document formats. (Please see the "Output Options" section of RStudio's reference site at http://rmarkdown.rstudio.com/ for more information.) Did you notice that this thing was in bold and that the previous thing was a web link?

1 Lists

1.1 Numbered list

Material for this document has been heavily borrowed from several documents. (Notice how a numbered list is being created below.)

- 1. Markdown cheatsheet at http://warpedvisions.org/projects/markdown-cheat-sheet.md.
- 2. R markdown reference from R Studio's site at http://rmarkdown.rstudio.com/
- 3. http://rmarkdown.rstudio.com/authoring_basics.html
 - Item 3a
 - Item 3b
- 4. Source 4

1.2 Bulleted (unordered) list

As previously mentioned, the objectives of this document are two fold.

- Learn the basics of markdown
- Learn how R code and output can be interspersed with markdown to create reports/documents.
- Another one
 - Item 3a
 - Item 3b
- And yet another one

2 How can headers be defined?

The header used above can be created using a different approach, using a single *hashtag* (wasn't that in *italics*?) to the left of the title of the header.

3 Header 1

- 3.1 Header 2
- 3.1.1 Header 3
- 3.1.1.1 Header 4
- 3.1.1.1.1 Header 5

4 Images

You can insert images in the document as well. For instance, if you have an image of a real apple in your working directory, then you can insert it in the document in the following manner.

If you wanted to show an images from a website, then that can also be done.



Figure 1: This is a picture of a honey crisp apple

5 Tables

Header	Header	Right
Cell	Cell	\$10
Cell	Cell	\$20

- Outer pipes on tables are optional (if you are not concerned with aesthetics, just drop)
- Colon used for alignment (right versus left)

6 HTML Tags

You can use html tags as well in markdown documents. For example, you could've used an tag to insert images. Super basics of html can be found here

7 Equation

Standard deviation,
$$s = \sqrt{\frac{1}{N-1} \sum_{i=1}^{N} (x_i - \overline{x})^2}$$

8 Blockquotes

A friend once said:

It's always better to give than to receive.

9 Manual Line Breaks

End a line with two or more spaces

For example, this line looks insanely chopped.

10 Miscellaneous

 $\frac{1}{2}$ superscript² $\frac{1}{2}$