## Histogram of a Randomly Generated Variable

We ran the following commands in R, displayed using the verbatim environment.

```
R> # Generate a random variable.
    epsilon <- rnorm(1000)

# Plot a histogram.
fig_ext <- 'eps'
fig_dir <- 'Figures'
fig_file_name <- sprintf('name_of_figure.%s', fig_ext)
out_file_name <- sprintf('%s/%s', fig_dir, fig_file_name)

setEPS()
postscript(out_file_name)

hist(epsilon, col = 'blue')

dev.off()</pre>
```

It looks boring, is not as easy to read as code in a good text editor but it does get the message across.

Instead, we can display the code block using the lstlisting environment from the listings package.

```
R> # Generate a random variable.
    epsilon <- rnorm(1000)

# Plot a histogram.
    fig_ext <- 'eps'
    fig_dir <- 'Figures'
    fig_file_name <- sprintf('name_of_figure.%s', fig_ext)
    out_file_name <- sprintf('%s/%s', fig_dir, fig_file_name)

setEPS()
    postscript(out_file_name)

hist(epsilon, col = 'blue')

dev.off()</pre>
```

Notice that the code above is highlighted according to the color scheme set in the \lstset command in the preamble to this document.<sup>1</sup>

¹The command \lstset above was displayed using the \texttt{} command, with the backslash displayed using the \textbackslash command, to avoid any confusion with another LaTeXcommand. In the previous sentence, the commands \texttt{} and \textbackslash were displayed using the \verb|| command, which is an inline version of the verbatim environment. Note that the argument of \verb|| in the first instance of \verb|| is enclosed in vertical bars or "pipes" | instead of braces or curly brackets {}, in case you want to display LaTeXcommands inline and want to prevent any braces from interfering with the \texttt{} command itself. You can also replace the pipes with many other repeated characters, as long as the character you choose is the first character after the \verb in the \verb{} command. Normally, you can use the \verb command anywhere in the main text of a document; however, the instances of \verb in this footnote were enabled by the \usepackage{fancyvrb} package declared in the preamble and the command \VerbatimFootnotes anywhere in the document before the command \verb is used in a footnote.

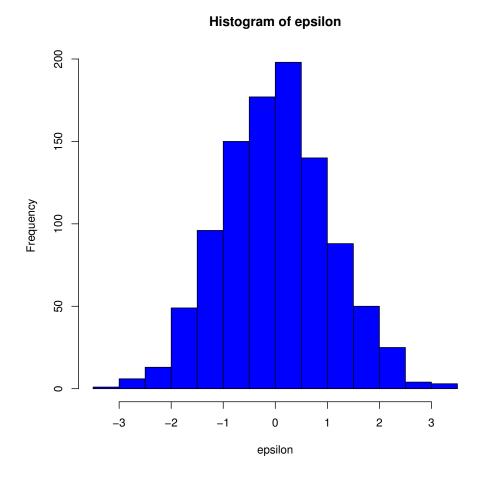


Figure 1: Caption Goes Here

In any case, the histogram in Figure 1 shows the result of these commands. Figures can be rendered in LATEX using the includegraphics command from the graphicx package.