

## Appendix A

# Use of the Sweave (.Rnw) Exercise Files

The following is a wrapper file, called **wrap-basic.Rnw**, for the sets of exercises generated by processing **rbasics.Rnw** and **rpractice.Rnw**. It is actually pure  $\LaTeX$ , so that it is not strictly necessary to process it through R's `Sweave()` function.

```
\documentclass[a4paper]{article}

\usepackage{url}
\usepackage{float}
\usepackage{exercises}
\usepackage{nextpage}
\pagestyle{headings}
\title{``Basic R Exercises'' and ``Further Practice with R''}
\author{John Maindonald}
\usepackage{Sweave}
\begin{document}

\maketitle
\tableofcontents

\cleartooddpage

\include{rbasics}
\cleartooddpage
\setcounter{section}{0}
\include{rpractice}
\end{document}
```

To create a  $\LaTeX$  file from this, ensure that **wrap-basic.Rnw** is in the working directory, and do:

```
> Sweave("wrap-basic")
```

This generates the file **wrap-basic.tex**

Now process **rbasic.Rnw** and **rpractice.Rnw** through `Sweave()`:

```
> Sweave("rbasics", keep.source=TRUE)
> Sweave("rpractice", keep.source=TRUE)
```

This generates files **rbasics.tex** and **rpractice.tex**, plus pdf and postscript versions of the graphics files. Specifying `keep.source=TRUE` ensures that comments will be retained in the code that appears in the  $\LaTeX$  file that is generated.

Make sure that the file **Sweave.sty** is in the  $\LaTeX$  path. A simple way to ensure that it is available is to copy it into your working directory. Process **wrap-basic.tex** through  $\LaTeX$  to obtain the pdf file **wrap-basic.pdf**.

You can find the path to the file **Sweave.sty** that comes with your R installation by typing:

```
> paste(R.home(), "share/texmf/", sep="/") # NB: Output is for a MacOS X system
```

```
[1] "/Library/Frameworks/R.framework/Resources/share/texmf/"
```