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The R Student Companion. By Brian Dennis. Boca Raton, FL: Chapman Hall/CRC. 2013. 339 pages. UK£26.99 (paperback). ISBN 978-1439875407.

My approach to this book is as an introductory text for learning the R language, so I am more concerned with how it presents the R language than with its Mathematical or Statistical content. Norman Matloff's review (2013) provides useful comments on the latter.

One of the positive features of this book is its fearlessness. The message is that you are never too young to learn R (the book is aimed at high school and college students) and that the best way to learn is to jump straight into writing R expressions. The author's enthusiasm for tackling challenges head on also shines off the page. There is a concern that sometimes the book may get a little too fearless; for example, some of the exercises are quite ambitious. The monthly mortgage payments calculations starting on page 25 is quite a lot to take in for someone just getting started.

I am also in favour of the hands-on approach of the book; it is clearly written to be read while sitting at a keyboard. However, the approach does sometimes stray into rough-and-ready coding. For example, starting on page 55, an example from economics and political science, the reader is encouraged to type a substantial number of data values manually within R expressions in a text file. The reader is then encouraged to save a copy of this text file under a new name before adding further R code to work with the data. It would be better practice to read data into R from something preprepared, like a CSV file, and it would be better practice to source() common R code rather than creating multiple copies of the R code. It must be acknowleged that the author faces a non-trivial problem with how to order topics, such as the risk of frustrating the reader by placing file input/output before more interesting material, but there is a danger in the current approach of encouraging poor code management habits.

The problem-based style of the book is another plus, where learning is motivated by first setting up an interesting question to answer. For example, I enjoyed the "molar mass" example starting on page 46. The book also elevates R above just its use in Statistics and emphasises the fact that it is an enormously powerful tool for Scientific and Mathematical exploration in general. The examples also come from a very wide range of areas of application. One downside is that this approach can sometimes lead to a somewhat chaotic ordering of topics as the reader encounters R concepts in the order that the problems present them. An example is the sudden introduction of NaN values early on in the discussion of functions in Chapter 3.

One important disappointment with the text is the fact that the R code samples do not provide a good role model for code layout because they lack indenting and do not (consistently) use white space around operators or between function arguments.

Overall, this book provides a lively and interesting introduction to R. It provides a lot of useful material for introducing a very powerful tool to enquiring young minds. However, the successful use of this text within the classroom may require the firm hand of an instructor with a solid understanding of both R and

code management practices.

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References

MATLOFF, N. (2013). The R Student Companion. J. Stat. Soft. $\bf 52,$ Book Review 4, 1–2.