

Pages extracted from Robert Muenchen's book, "R for SAS and SPSS Users."

See <http://rforsasandspssusers.com>

### **6.7.3 JGR Java GUI for R**

The Java GUI for R, JGR (pronounced “jaguar”) is very similar to R’s own simple interface, making it very easy to learn [15]. It adds some helpful tools, like syntax checking in its program editor. It also provides the help files in a way that lets you execute any part of an example you select. That is very helpful when trying to understand a complicated example.

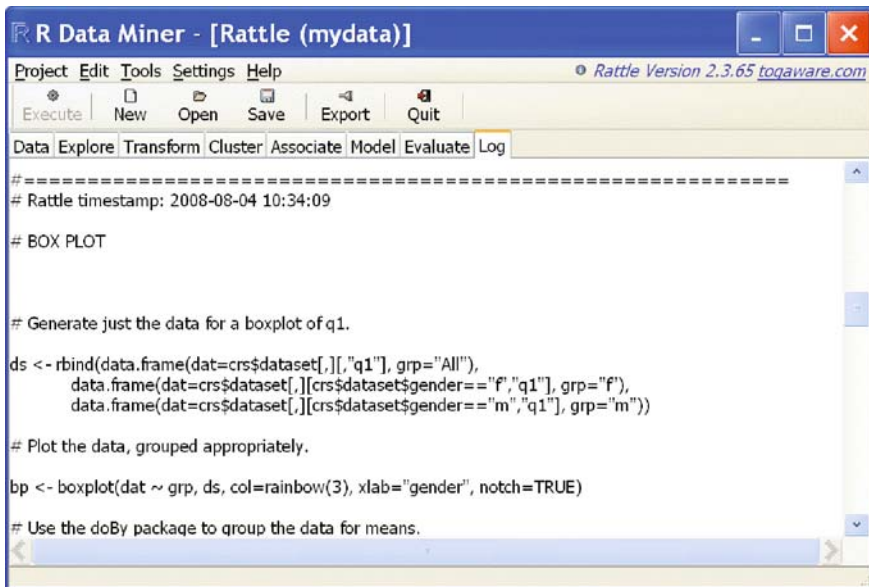


Fig. 6.7 An R program written by RATTLE based upon a menu selection to do a boxplot

To install it on Microsoft Windows or Apple Macintosh, you must download and run its installer from its website <http://rosuda.org/JGR/> [16]. Linux users have some additional minor steps that are described at the site.

In Fig. 6.8, the JGR program editor has automatically color-coded my comments, function names, and arguments, making it much easier to spot errors.

In this next example (Fig. 6.9), when I typed "cor(" it offered a box showing the various arguments that control the cor function for doing correlations. That is very helpful when you are learning!

JGR's package manager makes it easier to control which packages you are using (Fig. 6.10). Simply checking the boxes under "loaded" will load those packages from the library. If you also check it under "default" JGR will load them every time you start JGR. Without JGR's help, that feature would require editing your .Rprofile.

JGR's object browser makes it easy to manage your workspace (Fig. 6.11). Selecting different tabs across the top enable you to see the different types of objects in your workspace. Below I right clicked on gender, this brought up the box listing the number of males, females, and missing values (NAs). If you have a list of models, you can sort them easily by various measures, like their R-squared value.

Double-clicking on a data frame in the object browser starts a data editor (Fig. 6.12), which is much nicer than the one built into R. It lets you rename variables, search for values, sort by clicking on variable names, cut and paste values and add or delete rows or columns.

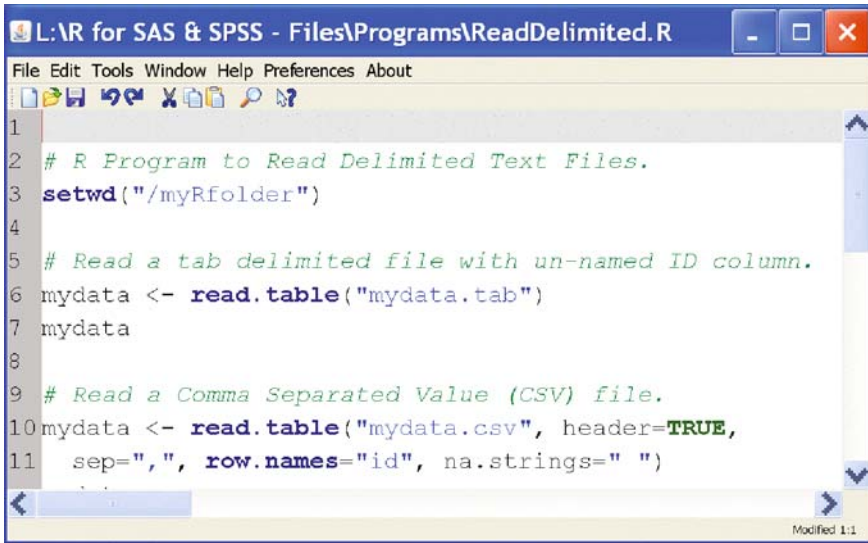


Fig. 6.8 Color-coded editor in JGR helps prevent typing errors

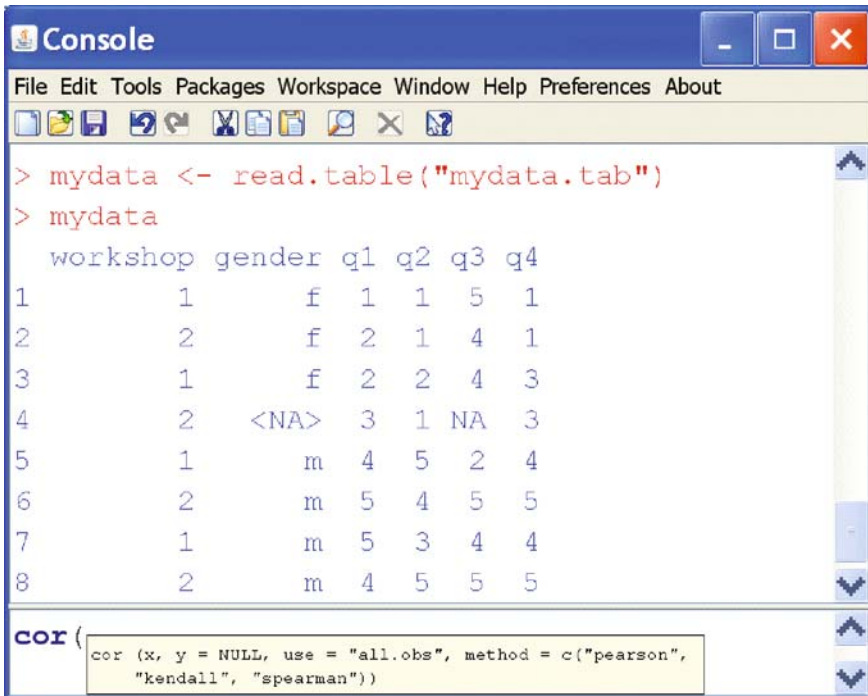


Fig. 6.9 JGR showing arguments that you might choose for the cor function

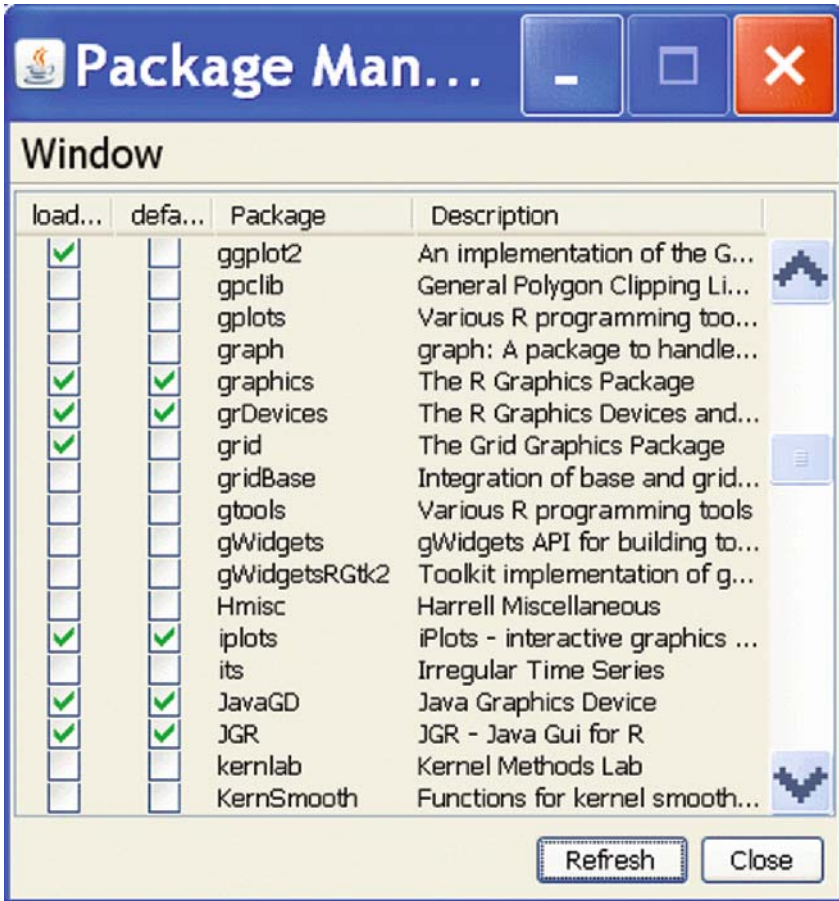


Fig. 6.10 JGR’s package manager which allows you to load packages from the library on demand and/or at startup

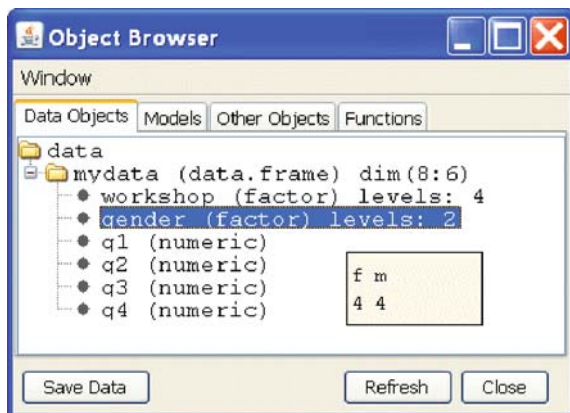
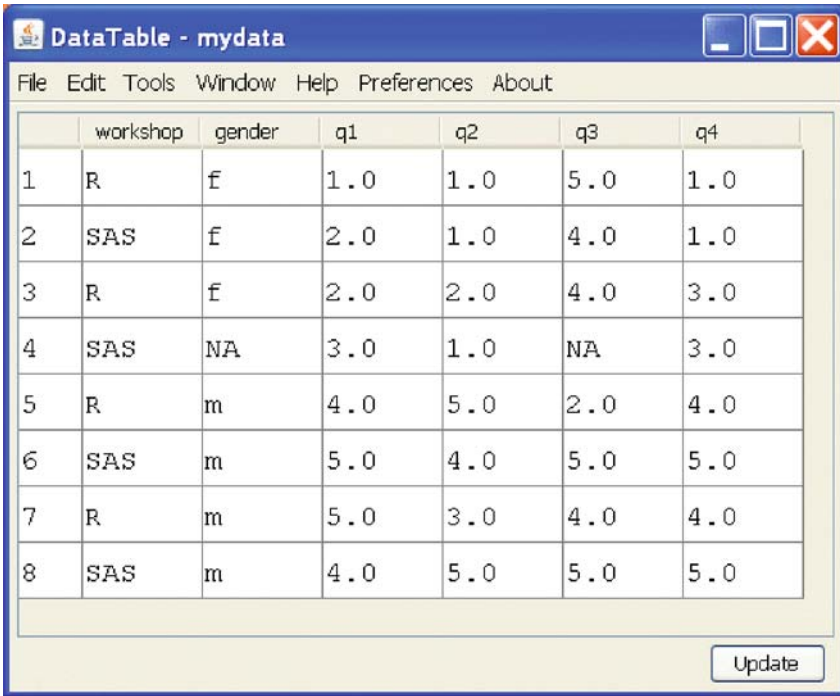


Fig. 6.11 JGR’s object browser shows information about each object in your workspace



The screenshot shows a window titled "DataTable - mydata" with a menu bar containing "File", "Edit", "Tools", "Window", "Help", "Preferences", and "About". The main area displays a data table with the following content:

	workshop	gender	q1	q2	q3	q4
1	R	f	1.0	1.0	5.0	1.0
2	SAS	f	2.0	1.0	4.0	1.0
3	R	f	2.0	2.0	4.0	3.0
4	SAS	NA	3.0	1.0	NA	3.0
5	R	m	4.0	5.0	2.0	4.0
6	SAS	m	5.0	4.0	5.0	5.0
7	R	m	5.0	3.0	4.0	4.0
8	SAS	m	4.0	5.0	5.0	5.0

An "Update" button is located at the bottom right of the window.

Fig. 6.12 JGR's data editor, an improvement over R's primitive one