Comprehensive Help

If you cannot find your answer with the above methods, the best place to probe further is the overall R help feature via the `help.start()` function. Just type:

```
> help.start()
>
```

This opens a comprehensive helping of R documentation, manuals, and help for all installed packages in your web-browser. This maybe the best place to look but if not, it is time to exploit Google.com, or ask your friendly collegues, or The Star Lab fellow. Also, see Section 1.2.5 above.

2.2 Packages and Libraries

It may very well be that after all the searching for some functionality, you come up empty handed. For example, you desperately want to estimate an ordered probit. R does not know how to do that out of the box. You could program the log-likelihood yourself and estimate it by writing your own maximization routine. Or you could just install a package that has this feature built in.

2.2.1 Installing and Loading Packages

It turns out the ability to estimate ordered logistic or probit regression is included in the `MASS` package. To install this package you run the following command:

```
> install.packages("MASS")
```

You will be asked to pick a CRAN mirror from which to download (generally the closer the faster) and R will install the package to your library. R will still be clueless. To actually tell R to use the new package you have to tell R to load the package's library each time you start an R session, just like so:

```
> library("MASS")
>
```

R now knows all the functions that are canned in the `MASS` package. To see what functions are implemented in the `MASS` package, type:

```
> library(help = "MASS")
>
```

A list of functions will now be displayed and you can see that the function to estimate an ordered probit is polr(). You now can get help the normal way:

```
> ?polr
>
```

2.2.2 Maintaining your Library

Packages are frequently updated. Depending on the developer this could happen very often. To keep your packages updated enter this every once in a while:

```
> update.packages()
```

As mentioned above, R itself will be updated frequently. Unfortunately, this process is not well implemented and generally requires you to install a fresh copy of R and removing the old installation. Unless you specify and maintain a separate directory for where R can find your packages, the removal of the old R installation will generally also remove all your packages.

This is not a problem especially given the quality of CRAN's mirrors. Before deleting your old copy of R, simply check which packages you had previously installed (especially those you need in order for your code to run). To see the list of all installed packages, type:

```
> library()
```

Just save the names of the packages and after starting your new R installation install them all at once again like this:

```
> install.packages("MASS", "myPackageX", "myPackageY", "
  myPackageZ")
```