

# Practical Computing for Economists

## Instructions for installing prerequisites for R/c++ integration

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### Windows users only: Install Rtools

1. Check which version of R you have. You can discover this by starting up either Rstudio or an R session and reading the initialization message at the top of the output. For example, on my computer the console for RStudio displays:

```
R version 3.1.0 beta (2014-03-28 r65330) -- "Spring Dance"
```

So I have version 3.1.0.

2. Go to <http://cran.r-project.org/bin/windows/Rtools/>. Look in the second column of the table on this page (“R compatibility”) and find the version of R which corresponds to your system. Then click the link to the left of that line to download. In the example from my system, I would download `Rtools31.exe`, as my system has a version of the form 3.1.x.
3. Run the installer you just downloaded. This should be just a matter of clicking on the file you downloaded.
4. Think hard about using a different operating system.

### Everyone:

1. Download the `prereq` folder. There are two ways to do this:

- a) If you have cloned into the class github repo, the folder will be in your file system already.
  - b) Download from chalk as a `.zip` or `.tar.gz` compressed folder. Extract to whatever local place you want.
2. Open `test.Rin` in RStudio.
  3. Change the line beginning `stDir <-` to refer to the location of `test.R` on your computer. For linux/mac users, addresses include forward slashes (/), but for Windows users, you will need to use double backslashes (eg `C:\\Users\\philip\\prereq`).
  4. Source the file, either by pressing `ctrl+shift+s` or by hitting the button at the top-right of the source box. This will install the packages you need for the class, and check that they work correctly on your machine. This may take a couple of minutes.
  5. Check the output. This is in the file `testOutput.txt`. Its contents should identically match those of `output.txt`. Windows users may struggle with the formatting of this last file, so just check that you have no error messages in `testOutput.txt`, and that there is output for four completed tests: a “Hello world” message; a vector from 0 to 100; a 10x10 identity matrix; and a matrix inversion test.