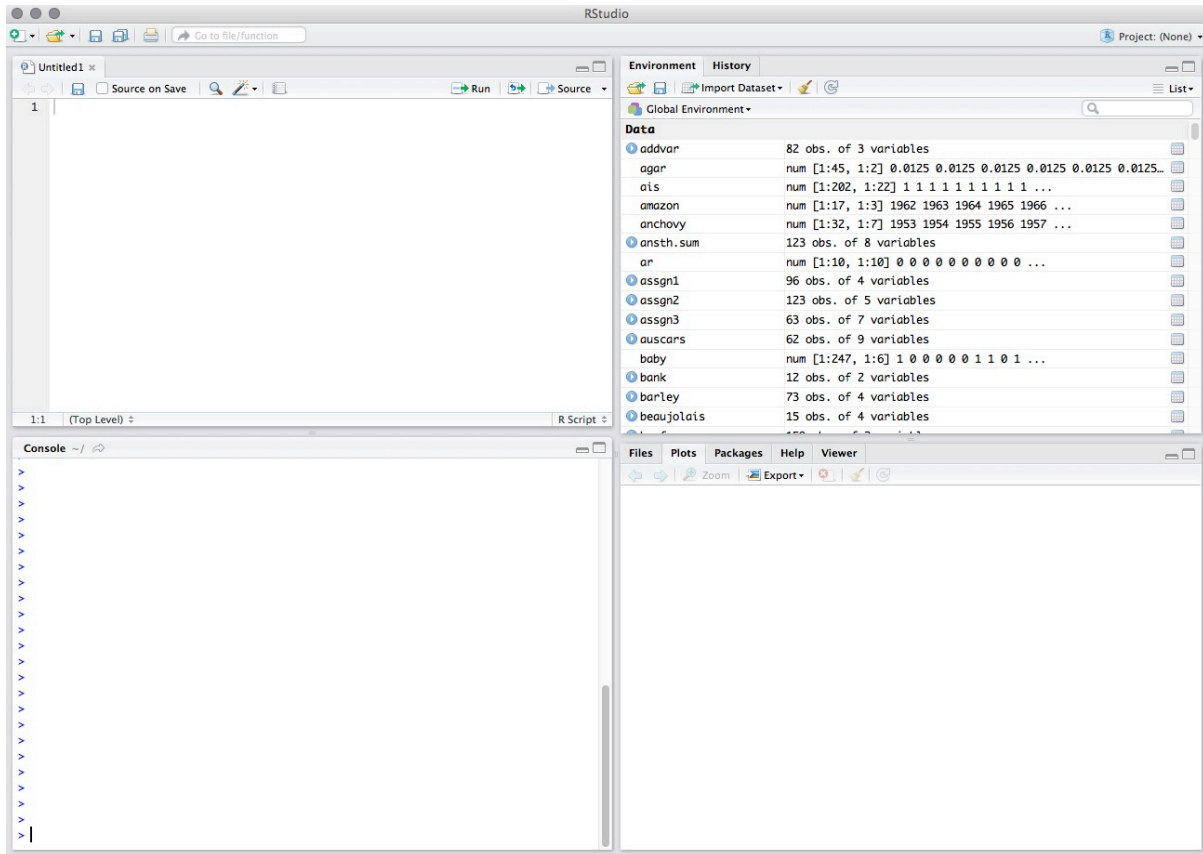# RESEARCH SCHOOL OF FINANCE, ACTUARIAL STUDIES AND APPLIED STATISTICS

INTRODUCTORY R WORKSHEET 1: GETTING STARTED

Introduction

Open RStudio on your PC or Mac (the icon looks like an R in a blue bubble). The interface below opens:

The top left window is the Script window, into which you can type commands for saving and editing. If you select a command (or set of commands) and click the Run button, the commands will run in the Console/Command window in the bottom left. You can also type commands directly into the Console to run them immediately, although then you won't be able to save them easily unless you copy them to a text/Word document. The other important panels are the Workspace Manager (top right) and the bottom right panel in which plots, help viewers and various other information appears.

To load the classdata, you go to the top right panel (you will see a tab labelled Environment) and click on the open file button (the folder with the green arrow) and navigate to the classdata.RData file you downloaded from Wattle (it will probably be in your downloads folder). Loading this workspace will ensure you

can access the data you need for the class. It is good practice to load the class data as the first thing you do when you start RStudio so that you have access to the data you'll need. Now, you just have to get used to the interface and start practising!

A Small Exercise

For some practice before you begin Worksheets 2 and beyond, try executing the following commands in R:

x<-1:100/10

y<-x*x

plot(x, y)

as.matrix(x);summary(x)

plot((x*x,y)

Note what happens as you execute each command. In particular, note that the last command contains an obvious error. You can correct errors either by retyping the command correctly (by deleting one of the left brackets) or by using the arrow keys to go back to (and then correct) previous commands. Note that if R's prompt changes from a > to a +, it means that R is waiting for you to complete a command (in this case, it is waiting for you to close the bracket). If you are stuck, hit the ESC key to return to the usual > prompt.

Quitting RStudio

To quit R, either select Quit from the File menu or type q() into the Commands Window.

Now, on to ...