

Statistics One

Lecture 3

Introduction to R

Two segments

- Download and install R
- Write a script

Lecture 3

Segment 1

Download and install R

First, why R?

- It's free!
- Works on any platform
- Open-source
- Flexible
- Excellent graphics
- Widely used in academia and business

Download and install R

- Go to the R website
 - <http://www.r-project.org>
- Click on the CRAN link
- Choose a Country and City
 - NOTE: Does not need to match your location
- Select the link that matches your operating system

Mac OS X

- Click on the link for R-2-14.1.pkg
- Select the option to Save File for the R-2-14.1.pkg
- Follow the installation prompts
- When the installation is complete, an R icon will be added to the Applications folder
- To open R, click the icon

Windows

- Choose the Base installation
- Click on the link for R-2.14.1
- Select the option to Run R-2.14.1-win32.exe file
- The remainder of the installation can be completed by following the prompts
- We recommend the customized startup
- When the installation is complete, an R icon will be added to the desktop
- To open R, double-click the icon

Install packages

- From the R console, type:
 `>install.packages("psych")`
 `>library(psych) # loads the package`
 `>search() # lists loaded packages`

Explore R

- Click the R icon
 - The R console appears
- Click “File” menu
- Click “New Document”
 - The R editor appears

Explore R

- R console
 - Write a line of code
 - Press Return (or Enter)
 - Result is returned
 - For example, use R as a calculator

Explore R

- R editor
 - Write several lines of code
 - Save as a “script”
 - Execute script
 - Results are returned in the R console

Explore R

- Set your preferences
 - Establish a “working directory”

Explore R

- Establish a working directory
 - Click on R
 - Click on Preferences
 - Click on Startup
 - Click on “Change” directory
 - Choose a “path”
 - ~/Documents/R

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