PROGRAMMING R

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INTRODUCTION

- Why R?
  ‣ Easy, coz' it's free.
- Officially speaking:
  ‣ R is a freely available language and environment for statistical computing and graphics which provides a wide variety of statistical and graphical techniques: linear and nonlinear modeling, statistical tests, time series analysis, classification, clustering, etc.

INSTALLATION

- <u>Download and Install R</u>

INSTALLATION

- Click <u>install R for the first time</u>.

R for Windows

Subdirectories:

base	Binaries for base distribution (managed by Duncan Murdoch). This is what you want to **install R for the first time**.
contrib	Binaries of contributed packages (managed by Uwe Ligges). There is also information on third party software available for CRAN Windows services and corresponding environment and make variables.
Rtools	Tools to build R and R packages (managed by Duncan Murdoch). This is what you want to build your own packages on Windows, or to build R itself.

- The latest version is always on the top.

R-3.0.1 for Windows (32/64 bit)

Download R 3.0.1 for Windows (52 megabytes, 32/64 bit)

Installation and other instructions

New features in this version

If you want to double-check that the package you have downloaded exactly matches the package distributed by R, you can compare the md5sum of the .exe to the true fingerprint. You will need a version of md5sum for windows: both graphical and command line versions are available.

INSTALLATION

- After saving the file on the Desktop, double-click on the icon for the file to run it.

- You will be asked what language to install it in - choose English.

- Click all the "Next"'s to install (during the process, you can choose the installation folder by yourself or just default), until you see "Completing the R for Windows Setup Wizard".

INSTALLATION

- Install packages: Packages>Install Package(s)

- choose website: Taiwan>NTU website **(recommended, or you'll regret for those wasted time like I did!)**

EDITORS FOR R

- Basic code editors provided by Rguis

- RStudio: GUI-based IDE for R **(recommended)**

- Vim-R-Tmux: R working environment based on vim and tmux

- Emacs (ESS add-on package)

- gedit and Rgedit

- RKWard

- Eclipse

- Tinn-R

- Notepad++ (NppToR)

PROGRAMMING

- Most important instruction for beginner:

  please get familiar with Google: [R] `your_syntax/problem`

- Introduction to R

REFERENCES

- R for Mac OS X FAQ
- R for Windows FAQ
- The R Manuals
- Getting started with R
- Welcome to a Little Book of R for Time Series!
- Programming in R
- R 學習筆記
- R_Note
- You can find the materials in R TA session here