

# R Installation and GUI Setup

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## 1. Installation

1. Go to <http://cran.csie.ntu.edu.tw>.<sup>2</sup> Click "Download R for (Mac) OS X."



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The Comprehensive R Archive Network

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- [Download R for Linux](#)
- [Download R for \(Mac\) OS X](#)
- [Download R for Windows](#)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2015-12-10, Wooden Christmas-Tree) [R-3.2.3.tar.gz](#), read [what's new](#) in the latest version.
- Sources of [R alpha and beta releases](#) (daily snapshots, created only in time periods before a planned release).
- Daily snapshots of current patched and development versions are [available here](#). Please read about [new features and bug fixes](#) before filing corresponding feature requests or bug reports.
- Source code of older versions of R is [available here](#).
- Contributed extension [packages](#)

Questions About R

- If you have questions about R like how to download and install the software, or what the license terms are, please read our [answers to frequently asked questions](#) before you send an email.

2. Click "R-3.2.3-snowleopard.pkg", **start download**



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### R for Mac OS X

This directory contains binaries for a base distribution and packages to run on Mac OS X (release 10.6 and above). Mac OS 8.6 to 9.2 (and Mac OS X 10.1) are no longer supported but you can find the last supported release of R for these systems (which is R 1.7.1) [here](#). Releases for old Mac OS X systems (through Mac OS X 10.5) and PowerPC Macs can be found in the [old](#) directory.

Note: CRAN does not have Mac OS X systems and cannot check these binaries for viruses. Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.

R 3.2.3 "Wooden Christmas-Tree" released on 2015/12/10

Please check the MD5 checksum of the downloaded image to ensure that it has not been tampered with or corrupted during the mirroring process. For example type  
md5 R-3.2.3.pkg  
in the *Terminal* application to print the MD5 checksum for the R-3.2.3.pkg image. On Mac OS X 10.7 and later you can also validate the signature using  
pkgutil --check-signature R-3.2.3.pkg

#### Files:

[R-3.2.3.pkg](#)

MD5-hash: d418ea2897709a230397d824231cb743  
SHA1-  
hash: e3ea68df6414022e5c177ac0dee061764cccd23  
(ca. 70MB)

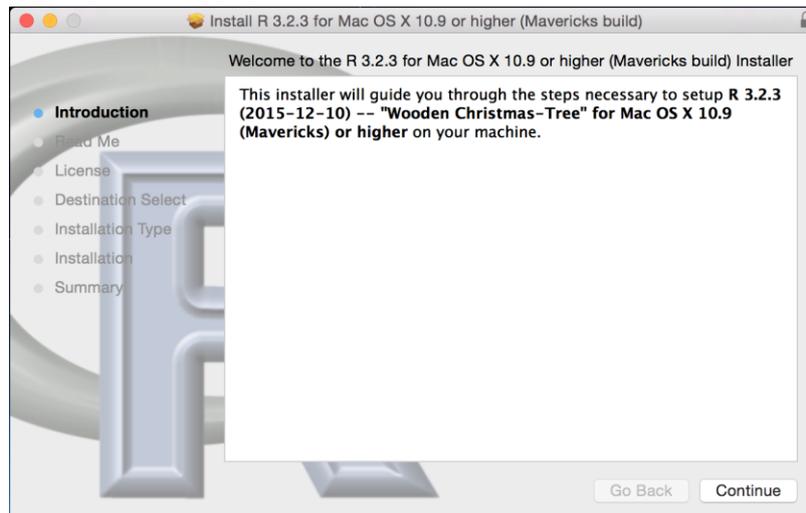
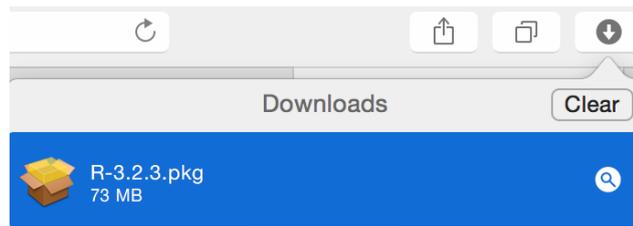
**R 3.2.3** binary for Mac OS X 10.9 (Mavericks) and higher, signed package. Contains R 3.2.3 framework, R.app GUI 1.66 in 64-bit for Intel Macs, Tcl/Tk 8.6.0 X11 libraries and Texinfo 5.2. The latter two components are optional and can be omitted when choosing "custom install", it is only needed if you want to use the `tc1tk` R package or build package documentation from sources.

Note: the use of X11 (including `tc1tk`) requires [XQuartz](#) to be installed since it is no longer part of OS X. Always re-install XQuartz when upgrading your OS X to a new major version.

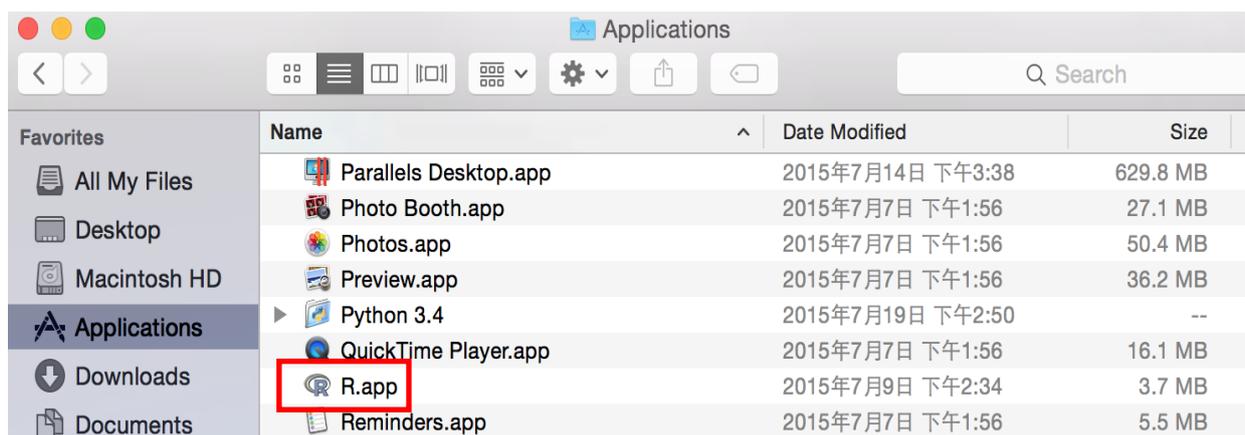
<sup>1</sup> Department of Information Management, National Taiwan University; {r94725023, r94725037}@ntu.edu.tw.

<sup>2</sup> This is the closest mirror site when you are in National Taiwan University. Go to <http://cran.r-project.org/mirrors.html> for other mirror sites.

3. Double click the file you just downloaded. Then click "Next" until the process finishes.



4. Click the shortcut **at the Application** to run the R.app GUI.<sup>3</sup>



<sup>3</sup> GUI is the abbreviation of Graphical User Interface.

```
R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

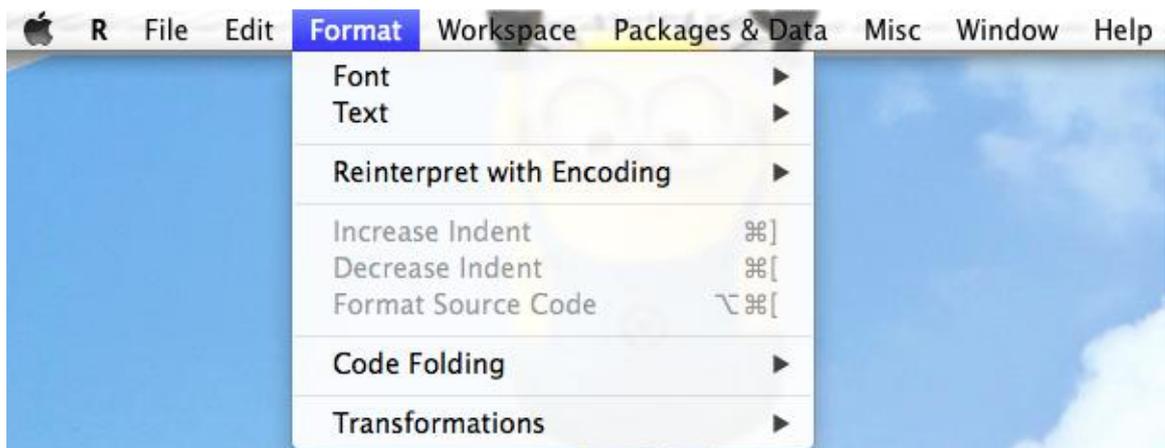
During startup - Warning messages:
1: Setting LC_CTYPE failed, using "C"
2: Setting LC_COLLATE failed, using "C"
3: Setting LC_TIME failed, using "C"
4: Setting LC_MESSAGES failed, using "C"
5: Setting LC_MONETARY failed, using "C"
[R.app GUI 1.65 (6784) x86_64-apple-darwin10.8.0]

WARNING: You're using a non-UTF8 locale, therefore only ASCII characters will work.
Please read R for Mac OS X FAQ (see Help) section 9 and adjust your system preferences accordingly.
[History restored from /Users/tammy/.Rapp.history]

>
```

## 2. GUI Setup

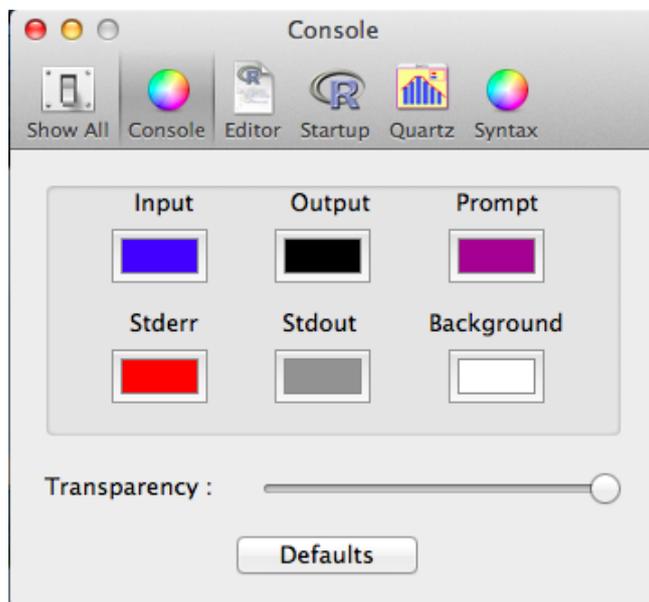
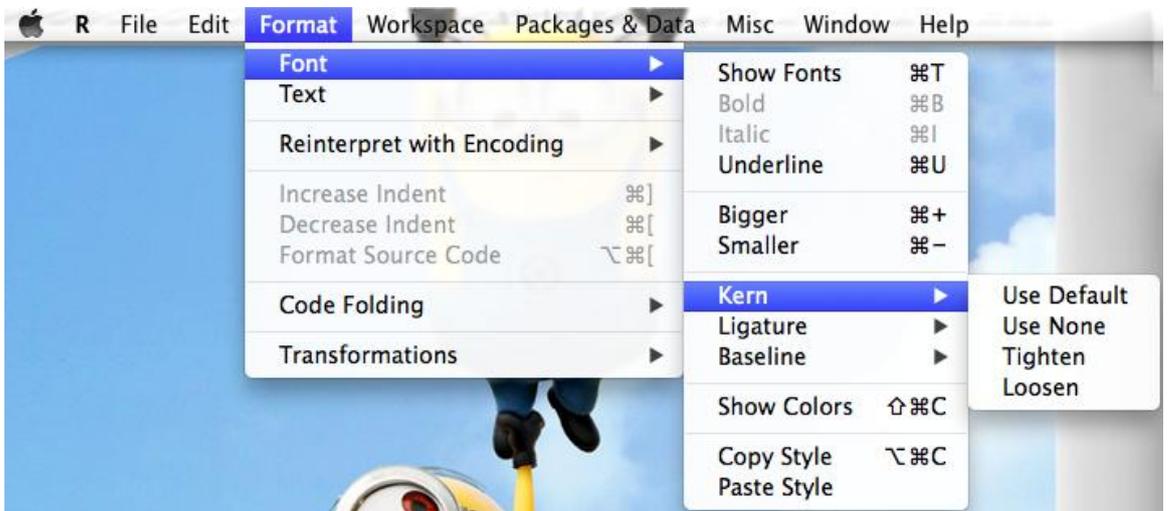
1. You may change your editor environment (or simply use the default setting):
  - a. Click "Format" and then "Font", "Text"



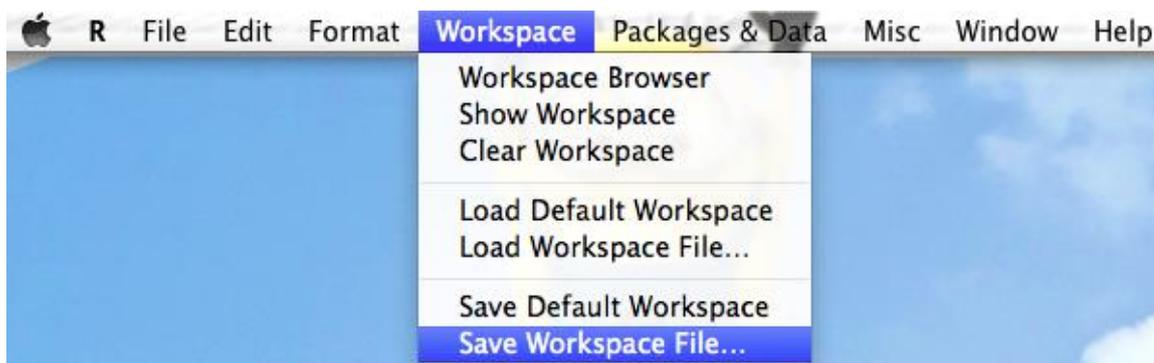
Or click "R" and then "Preferences..."



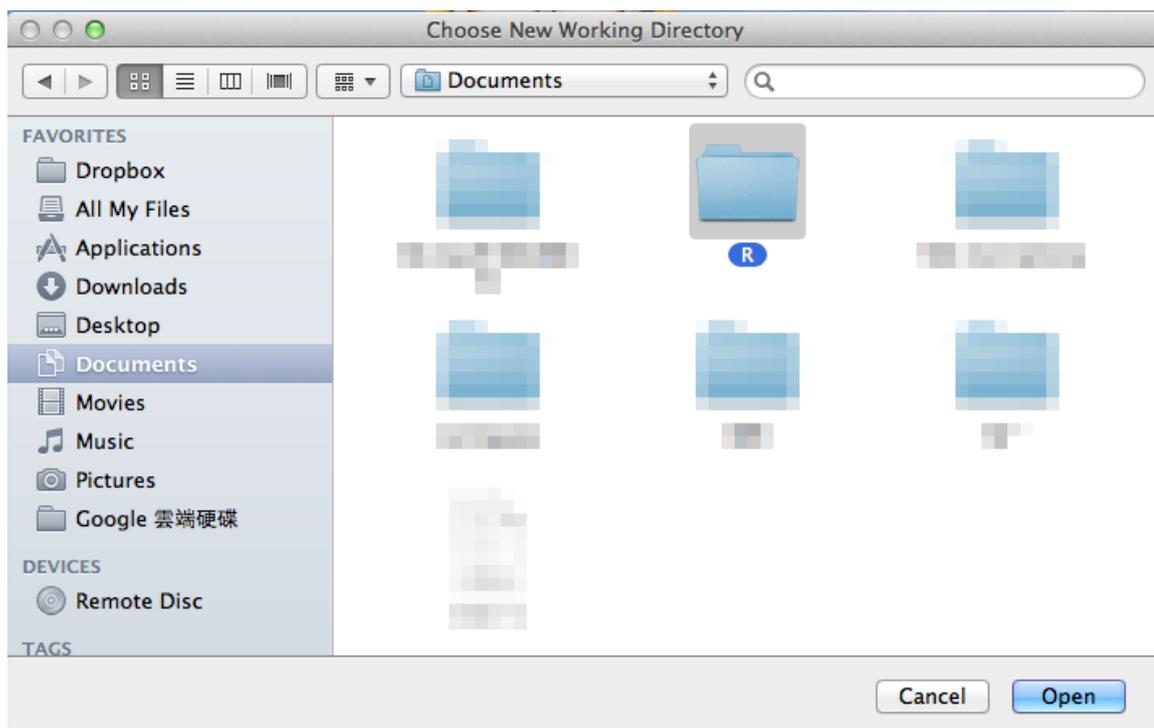
b. You may change the font size, background color, text color, etc.



c. Save your console setting file so that in the future you may load it.



2. Always set up your "work directory" before you start to work:
  - a. The first way is to click "Misc" and then "Change Working Directory...". Then browse to select the directory (folder) that you prefer to be the default location for saving and loading files.



- b. The second way is to type `setwd("C:/Users/user/Documents/R")`, where the path specified inside the double quotation marks should be replaced by the path you prefer.<sup>4</sup>

<sup>4</sup> For specifying the work directory, one may alternatively use backslashes (\). However, as we will explain in the future, to express a backslash in an R string, one needs to write TWO consecutive backslashes (\\). For example, one may type `setwd("C:\\Users\\user\\Documents\\R")` for the same effect.

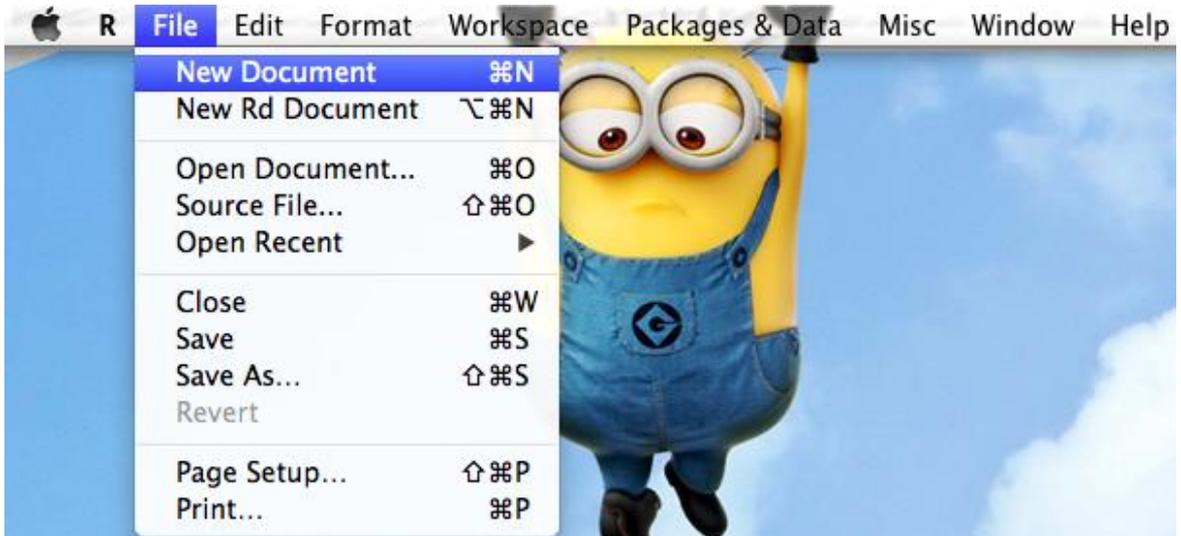
```
> setwd("/Users/tammy/Documents/R")
> |
```

- c. To make sure that it works, type `getwd()` to see the current work directory.

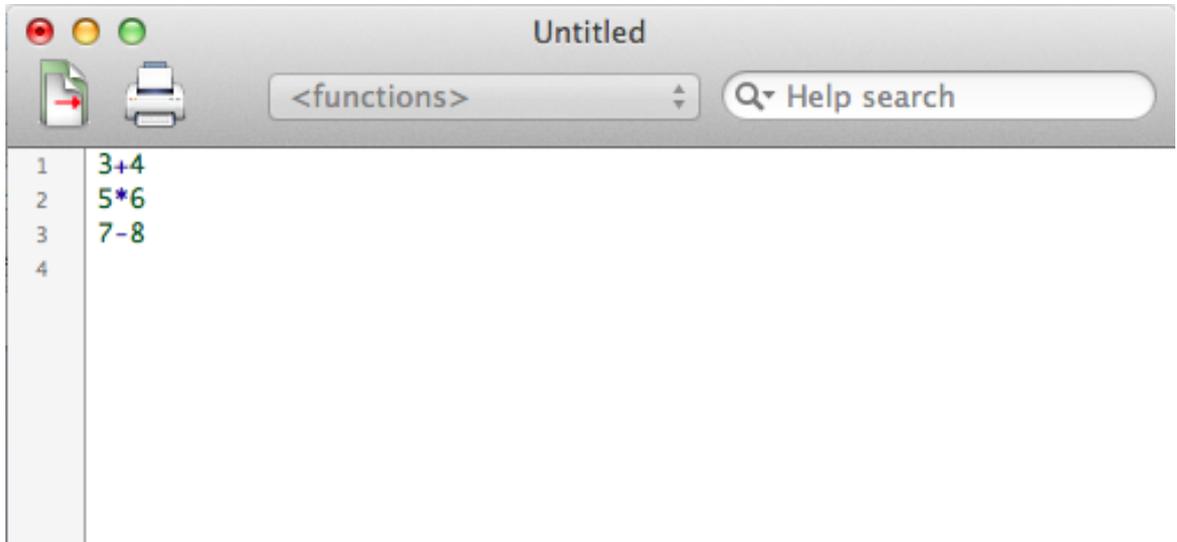
```
> getwd()
[1] "/Users/tammy/Documents/R"
```

3. You may create a new script file to store your R statements:

- a. Click "File" and then "New Document"



- b. Type several statements, one in a single line.



- c. Select those statements that you want to execute and then press "Command + return (enter)" to execute them at once in order.

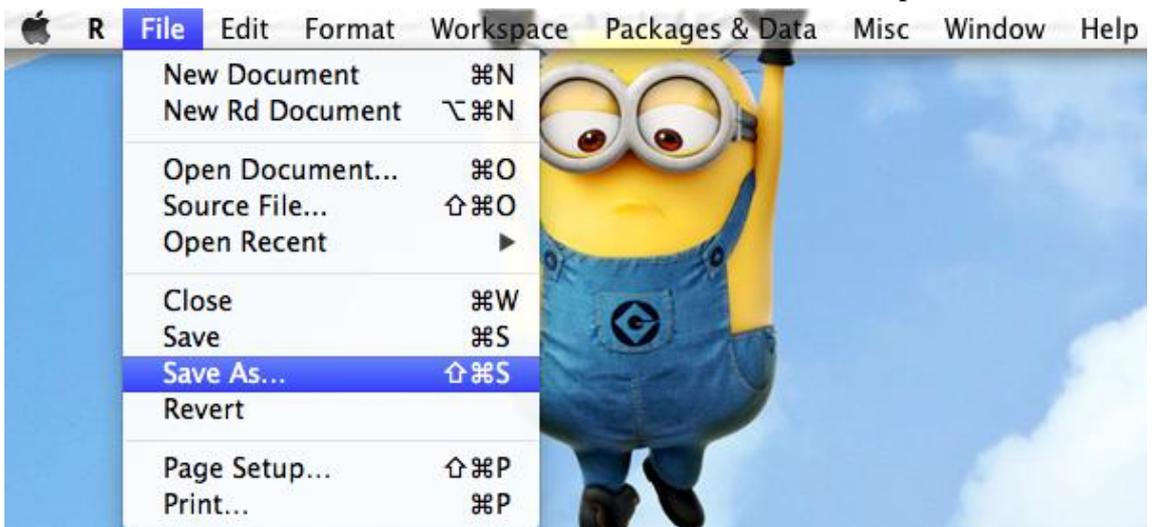
```
1 3+4
2 5*6
3 7-8
4

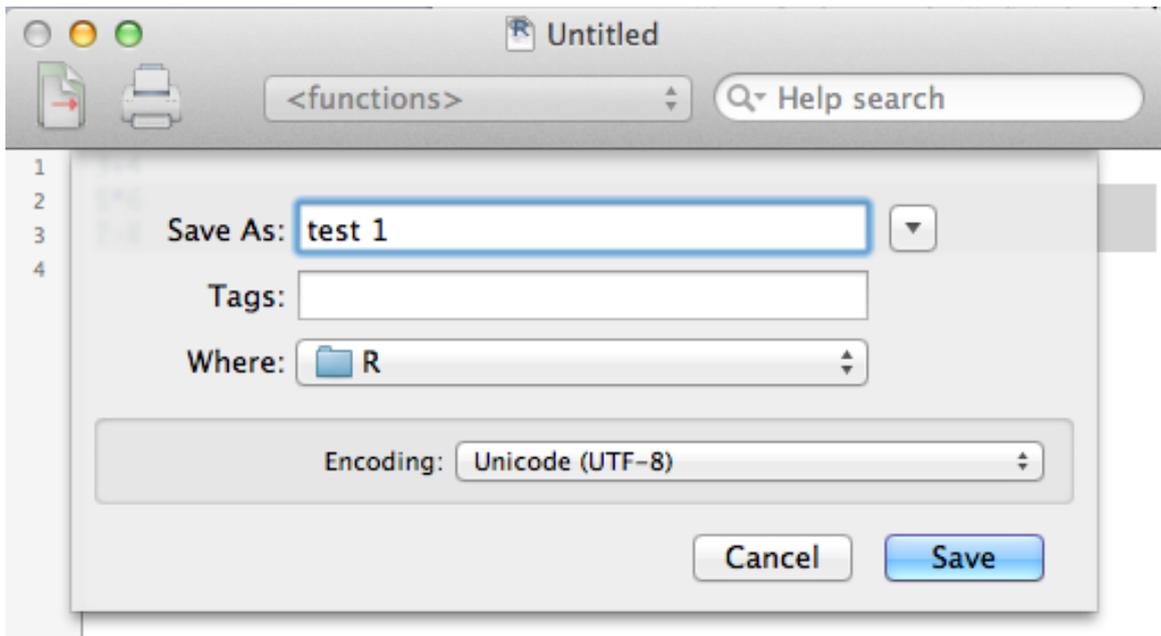
> 3+4
[1] 7
```

```
1 3+4
2 5*6
3 7-8
4

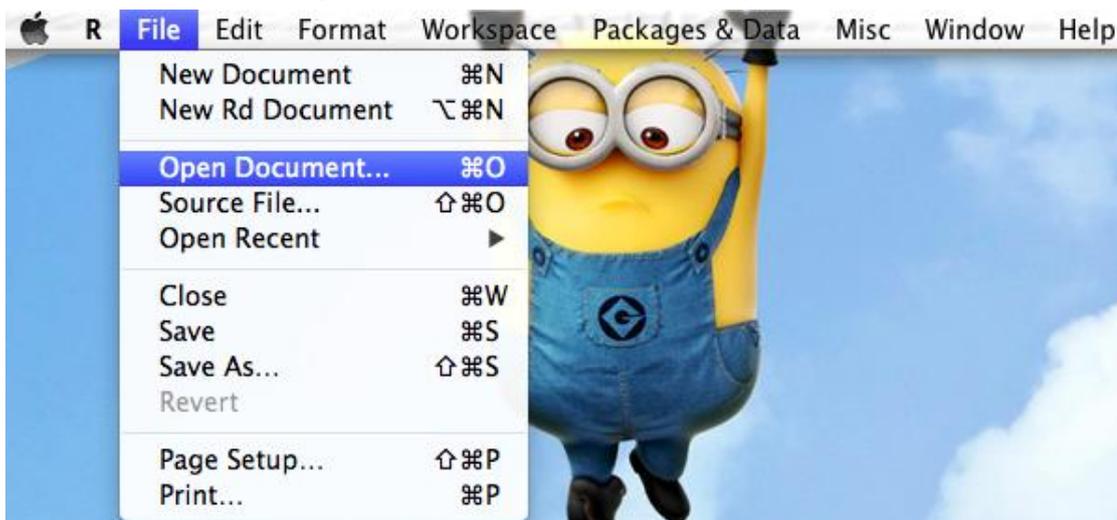
> 5*6
[1] 30
> 7-8
[1] -1
```

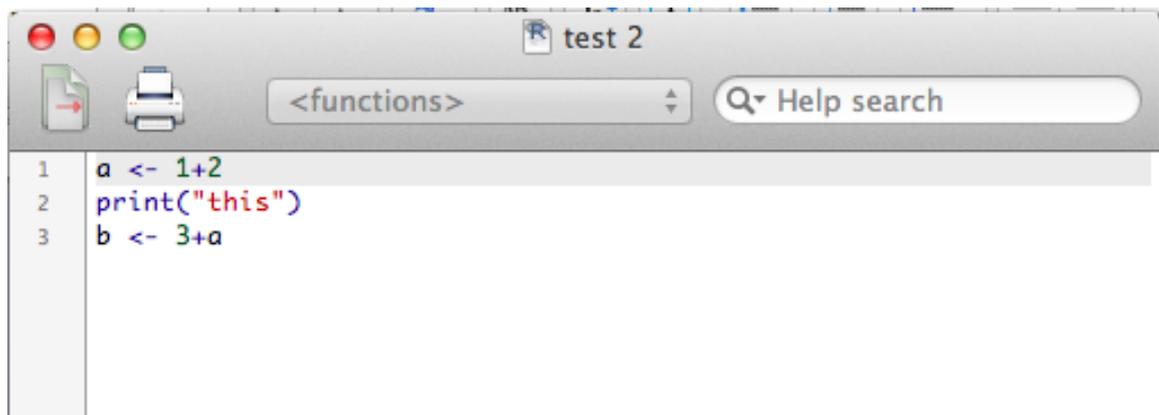
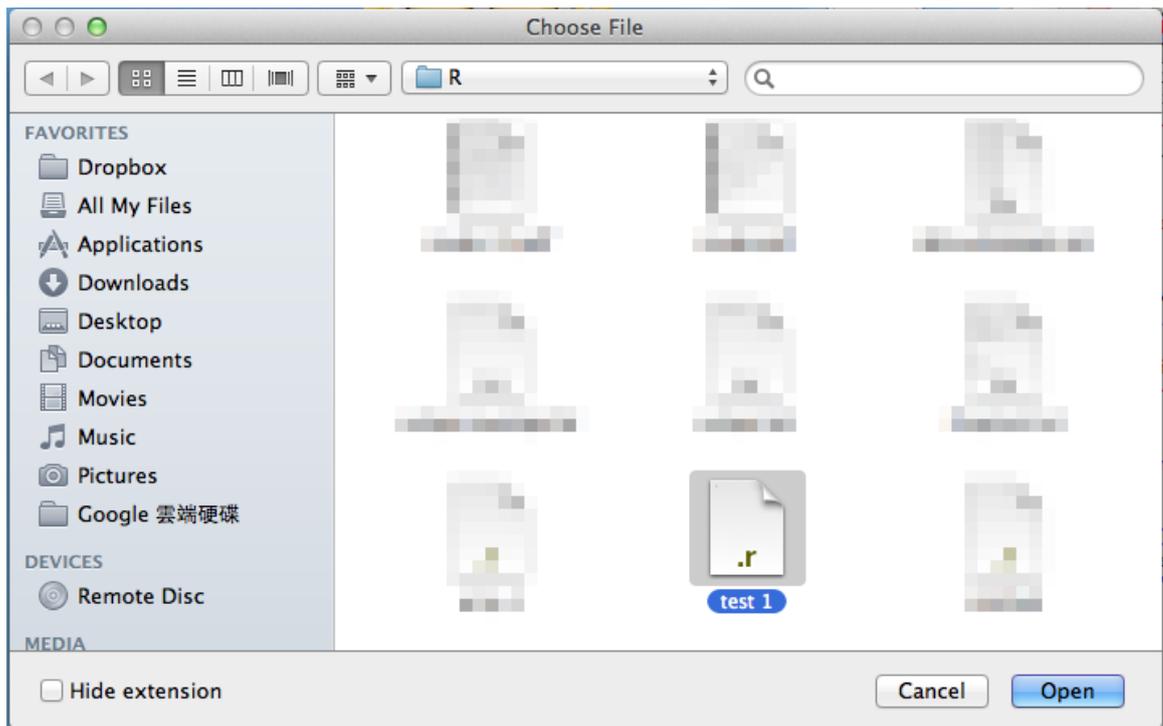
- d. Save it for future use: Click "File" and then "Save as...". Give the script file a name.



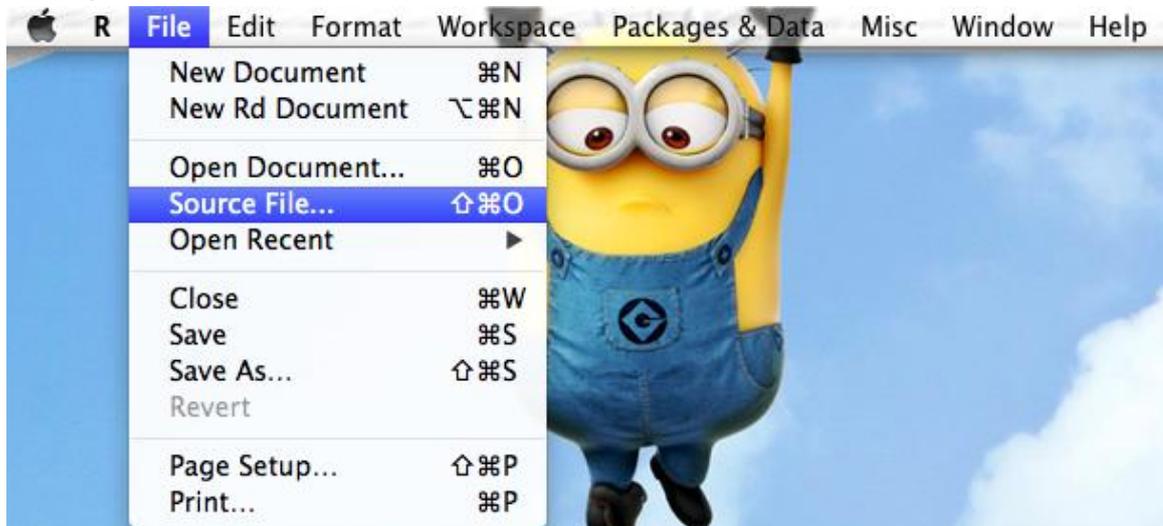


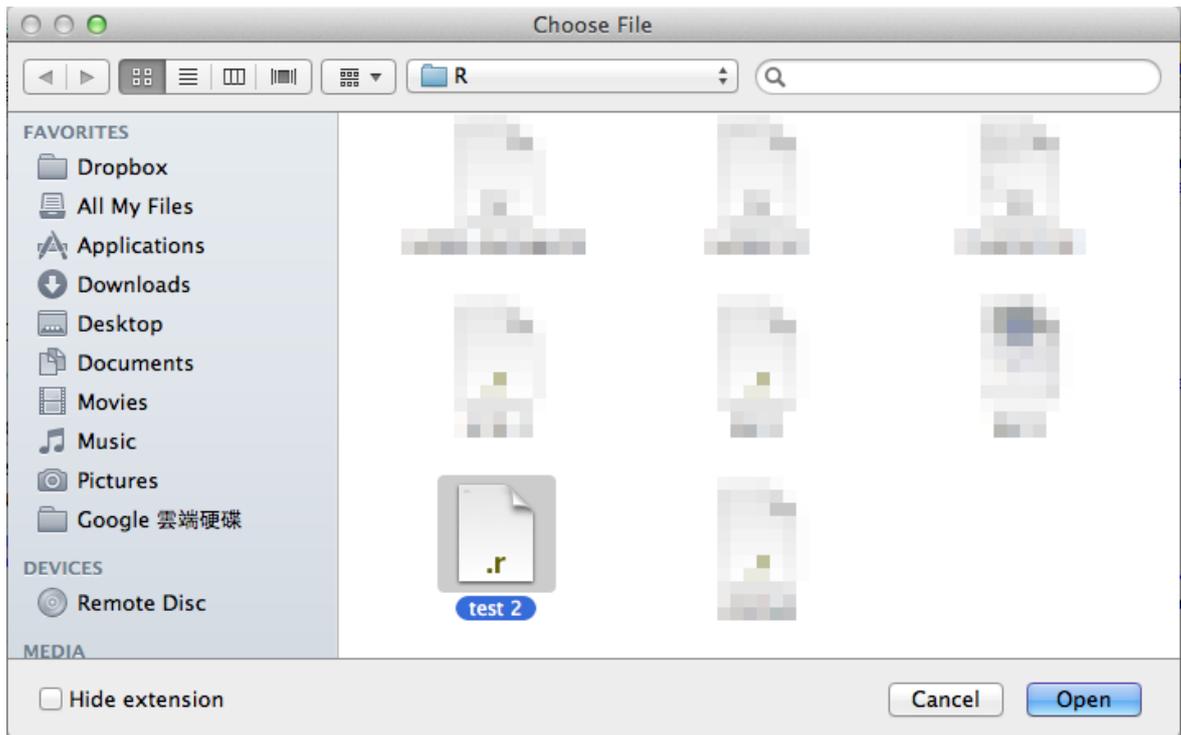
4. You may reload your previously saved script file:
  - a. Click "File" and then "Open Document..." or the directory icon. Browse to select a file.





- b. If you choose "Source R code...", those R statements in the script file will be executed directly.





```
> source("/Users/tammy/Documents/R/test 2.R")
[1] "this"
> a
[1] 3
> b
[1] 6
```

### 3. More advanced settings

For more information, check <http://cran.r-project.org/bin/macosx/RMacOSX-FAQ.html> or many other online documents.