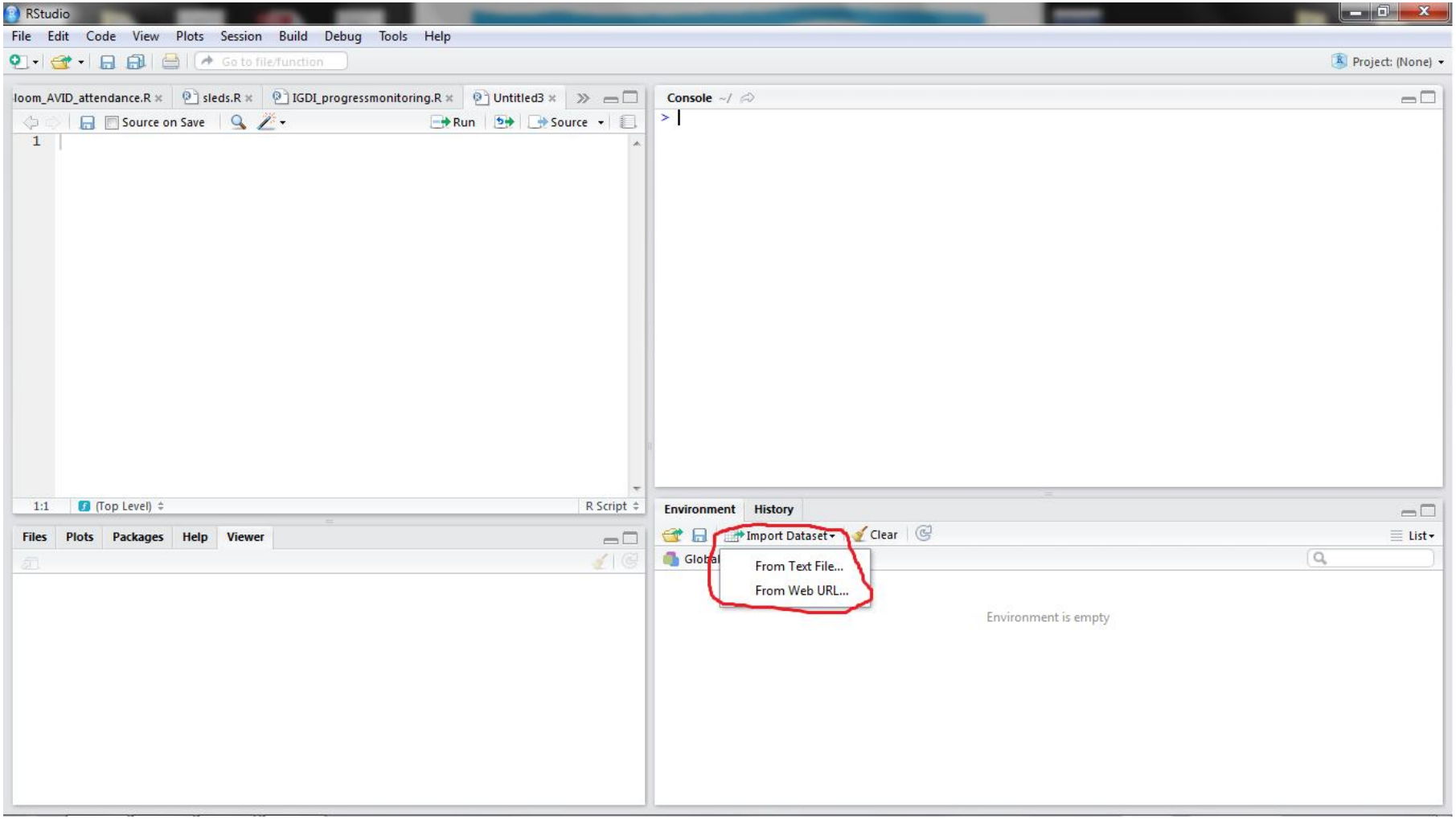
Welcome to the R Toolbox!

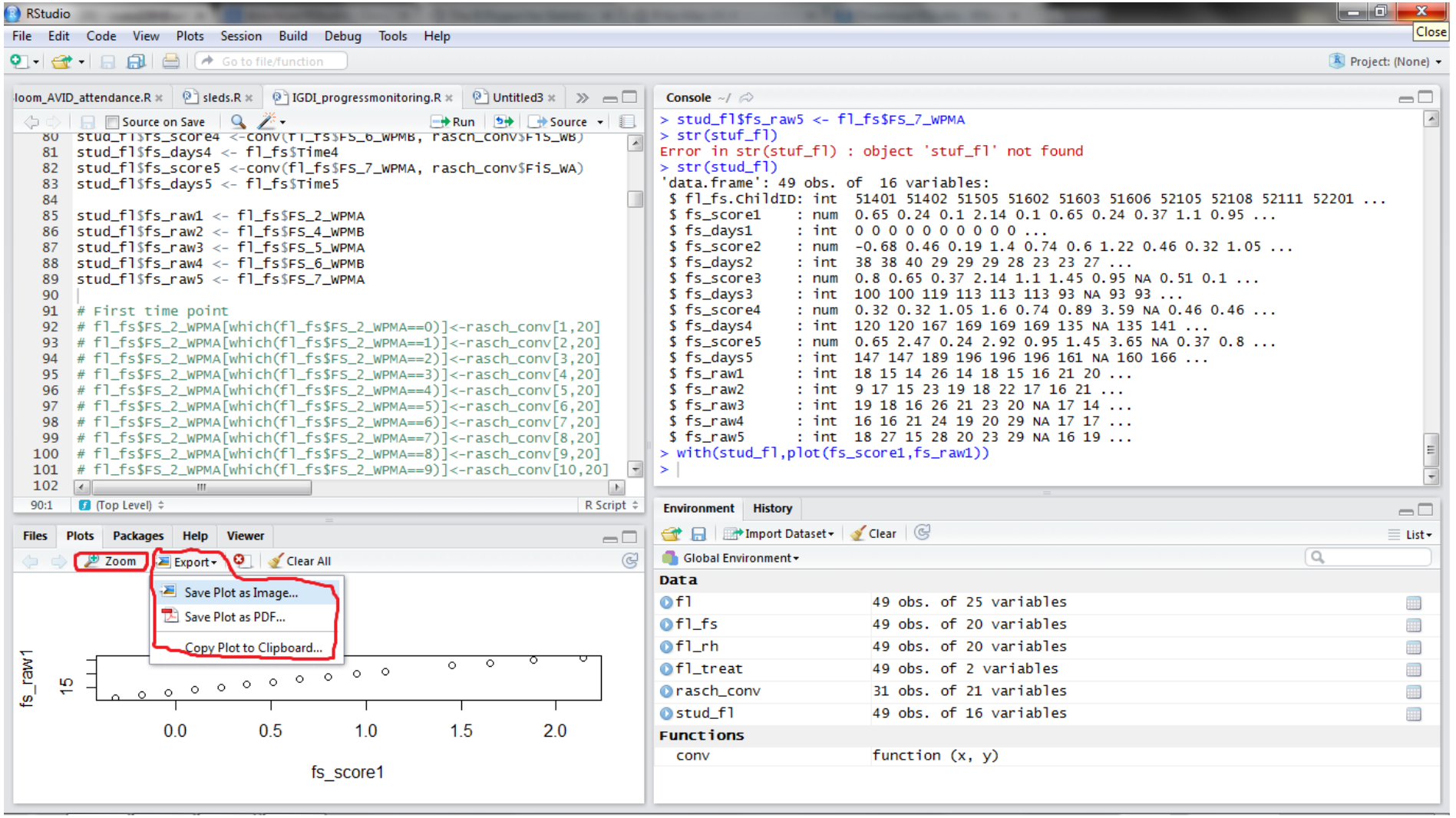
RStudio

- Download R
  - http://www.r-project.org/ (windows)
  - http://cran.r-project.org/bin/macosx/ (mac)
- Download Rstudio
  - http://www.rstudio.com/products/rstudio/download/

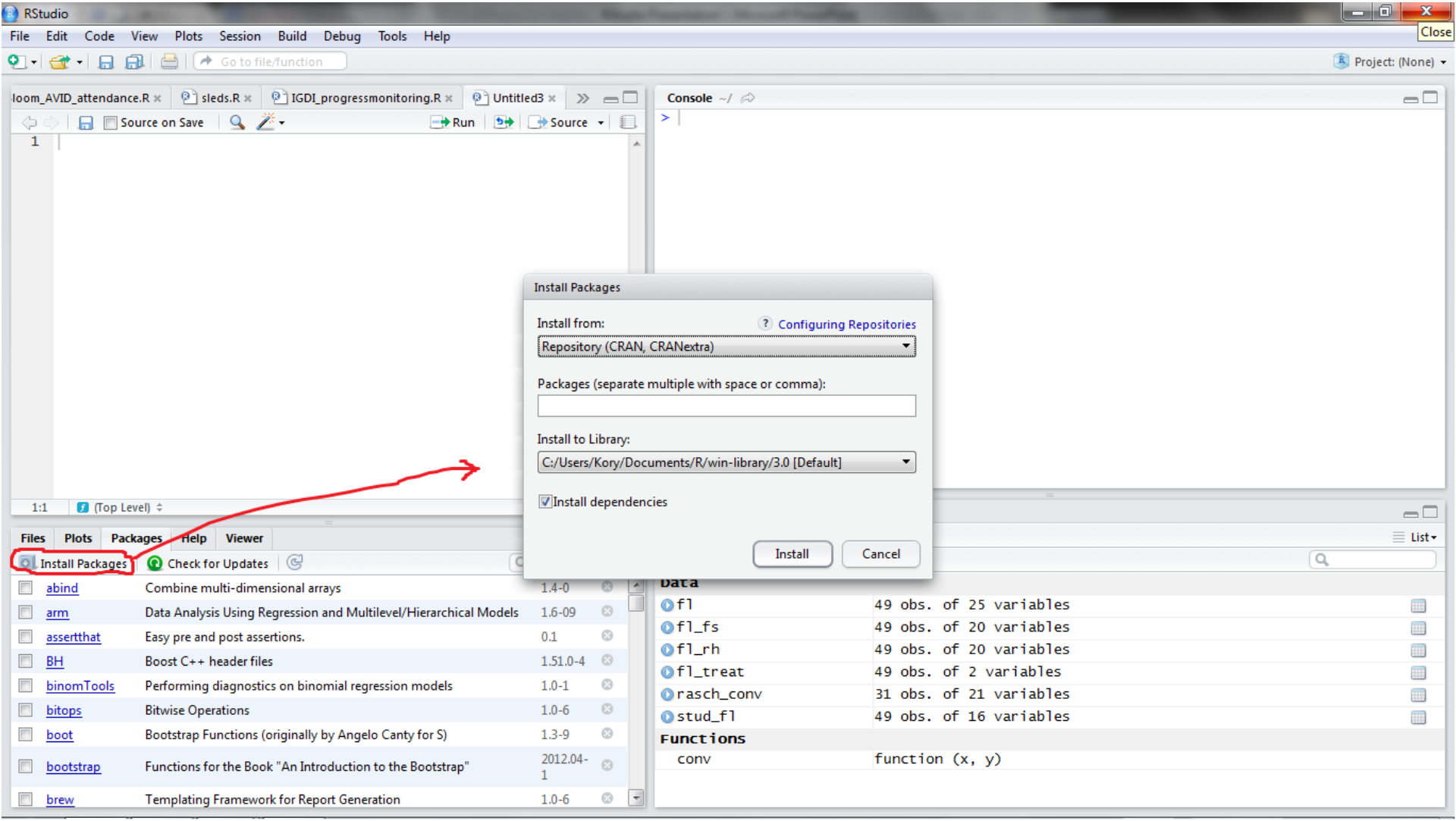
Import Files



Plots


RStudio
File Edit Code View Plots Session Build Debug Tools Help
Close
Project: (None)
loom_AVID_attendance.R
sleds.R
IGDI_progressmonitoring.R
Untitled3
Source on Save
Run
Source
80 stud_fl$fs_score4 <-conv(fl_fs$FS_6_WPMB, rasch_conv$FiS_WB)
81 stud_fl$fs_days4 <- fl_fs$Time4
82 stud_fl$fs_score5 <-conv(fl_fs$FS_7_WPMA, rasch_conv$FiS_WA)
83 stud_fl$fs_days5 <- fl_fs$Time5
84
85 stud_fl$fs_raw1 <- fl_fs$FS_2_WPMA
86 stud_fl$fs_raw2 <- fl_fs$FS_4_WPMB
87 stud_fl$fs_raw3 <- fl_fs$FS_5_WPMA
88 stud_fl$fs_raw4 <- fl_fs$FS_6_WPMB
89 stud_fl$fs_raw5 <- fl_fs$FS_7_WPMA
90
91 # First time point
92 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==0)]<-rasch_conv[1,20]
93 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==1)]<-rasch_conv[2,20]
94 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==2)]<-rasch_conv[3,20]
95 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==3)]<-rasch_conv[4,20]
96 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==4)]<-rasch_conv[5,20]
97 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==5)]<-rasch_conv[6,20]
98 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==6)]<-rasch_conv[7,20]
99 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==7)]<-rasch_conv[8,20]
100 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==8)]<-rasch_conv[9,20]
101 # fl_fs$FS_2_WPMA[which(fl_fs$FS_2_WPMA==9)]<-rasch_conv[10,20]
102
90:1 (Top Level) R Script
Console ~/
> stud_fl$fs_raw5 <- fl_fs$FS_7_WPMA
> str(stuf_fl)
Error in str(stuf_fl) : object 'stuf_fl' not found
> str(stud_fl)
'data.frame': 49 obs. of 16 variables:
$ fl_fs.childID: int 51401 51402 51505 51602 51603 51606 52105 52108 52111 52201 ...
$ fs_score1 : num 0.65 0.24 0.1 2.14 0.1 0.65 0.24 0.37 1.1 0.95 ...
$ fs_days1 : int 0 0 0 0 0 0 0 0 0 0 ...
$ fs_score2 : num -0.68 0.46 0.19 1.4 0.74 0.6 1.22 0.46 0.32 1.05 ...
$ fs_days2 : int 38 38 40 29 29 29 28 23 23 27 ...
$ fs_score3 : num 0.8 0.65 0.37 2.14 1.1 1.45 0.95 NA 0.51 0.1 ...
$ fs_days3 : int 100 100 119 113 113 113 93 NA 93 93 ...
$ fs_score4 : num 0.32 0.32 1.05 1.6 0.74 0.89 3.59 NA 0.46 0.46 ...
$ fs_days4 : int 120 120 167 169 169 169 135 NA 135 141 ...
$ fs_score5 : num 0.65 2.47 0.24 2.92 0.95 1.45 3.65 NA 0.37 0.8 ...
$ fs_days5 : int 147 147 189 196 196 196 161 NA 160 166 ...
$ fs_raw1 : int 18 15 14 26 14 18 15 16 21 20 ...
$ fs_raw2 : int 9 17 15 23 19 18 22 17 16 21 ...
$ fs_raw3 : int 19 18 16 26 21 23 20 NA 17 14 ...
$ fs_raw4 : int 16 16 21 24 19 20 29 NA 17 17 ...
$ fs_raw5 : int 18 27 15 28 20 23 29 NA 16 19 ...
> with(stud_fl,plot(fs_score1,fs_raw1))
>
Files Plots Packages Help Viewer
Zoom Export Clear All
Save Plot as Image...
Save Plot as PDF...
Copy Plot to Clipboard...
fs_raw1
15
0.0 0.5 1.0 1.5 2.0
fs_score1
Environment History
Import Dataset Clear List
Global Environment
Data
fl 49 obs. of 25 variables
fl_fs 49 obs. of 20 variables
fl_rh 49 obs. of 20 variables
fl_treat 49 obs. of 2 variables
rasch_conv 31 obs. of 21 variables
stud_fl 49 obs. of 16 variables
Functions
conv function (x, y)

Packages


RStudio
File Edit Code View Plots Session Build Debug Tools Help
Close
Project: (None)
Source on Save
Run
Source
Console
Install Packages
Install from:
Configuring Repositories
Repository (CRAN, CRANextra)
Packages (separate multiple with space or comma):
Install to Library:
C:/Users/Kory/Documents/R/win-library/3.0 [Default]
Install dependencies
Install
Cancel
Files Plots Packages Help Viewer
Install Packages
Check for Updates
abind Combine multi-dimensional arrays 1.4-0
arm Data Analysis Using Regression and Multilevel/Hierarchical Models 1.6-09
assertthat Easy pre and post assertions. 0.1
BH Boost C++ header files 1.51.0-4
binomTools Performing diagnostics on binomial regression models 1.0-1
bitops Bitwise Operations 1.0-6
boot Bootstrap Functions (originally by Angelo Canty for S) 1.3-9
bootstrap Functions for the Book "An Introduction to the Bootstrap" 2012.04-1
brew Templating Framework for Report Generation 1.0-6
Data
fl 49 obs. of 25 variables
fl_fs 49 obs. of 20 variables
fl_rh 49 obs. of 20 variables
fl_treat 49 obs. of 2 variables
rasch_conv 31 obs. of 21 variables
stud_fl 49 obs. of 16 variables
Functions
conv function (x, y)

Saving Syntax

- Click the save icon, which is the floppy disc
- R files cannot have any spaces in the name

Other features of RStudio

- Syntax
- Sweave/KnitR
- Markdown
- Presentation
- Examples

Resources

- About R part 1 of 4 (Roger Peng)
  - https://www.youtube.com/playlist?list=PLjTlxb-wKvXNSDfcKPFH2gzHGyjpeCZmJ
- Additional R videos (Roger Peng)
  - https://www.youtube.com/playlist?list=PLjTlxb-wKvXPqyY3FZDO8GqIaWuEDy-Od
- Latex for Sweave/KnitR
  - http://en.wikibooks.org/wiki/LaTeX

- Best way to learn is to use R