

16 Rules of the The R Bootcamp

1. Everything in R is an object
2. Use <- to create objects
3. Name objects with _
4. All objects have classes
5. Everything happens through functions
6. Functions have arguments
7. Arguments can have defaults
8. Functions expect certain object classes
9. View help files with ?
10. Data is stored in data frames
11. Select variables from a data frame with \$
12. Use RStudio Projects
13. Create separate folders for Data, Code
14. First load packages with library(), then load data
15. Use comments and spacing for readability
16. Struggle and ask for help!

A well organised .R file

The screenshot shows the RStudio interface for a project named 'Bootcamp_Example_Project'. The main editor displays the file 'TheRBootcamp_Cheatsheet.R'. The code is organized into sections separated by dashed lines, with comments explaining each step. Annotations with arrows point to specific parts of the code and the file structure:

- Use lots of comments with #**: Points to the first comment line in the script.
- Start by loading packages with library()**: Points to the lines where 'tidyverse', 'skimm', and 'broom' are loaded.
- Create new objects with assignment arrow <-**: Points to the lines where 'mcdonalds' and 'baselers' are created using 'read_csv()'.
- Assign key results (like a statistical test) to an object**: Points to the line where 'cal_sod_htest' is assigned the result of 'cor.test()'.
- Always use projects!**: Points to the 'Bootcamp_Example_Project' window title.
- Press Tab to easily find external files**: Points to the file explorer showing '1_Data' containing 'baselers.csv', 'happiness.csv', and 'mcdonalds.csv'.
- Press Tab to see function arguments**: Points to the argument list in the 'read_csv()' function call.
- Put all data files in a "Data" folder**: Points to the '1_Data' folder in the project file explorer.

The code in the editor includes comments for loading packages, loading data from external files, exploring data, calculating descriptives, conducting tests, and saving key results. The file explorer at the bottom shows the project structure with folders for '0_Materials', '1_Data', and '2_Code'.