HELLO AND WELCOME

INTRODUCE YOURSELF PLEASE

R Ladies
Urmia,Iran

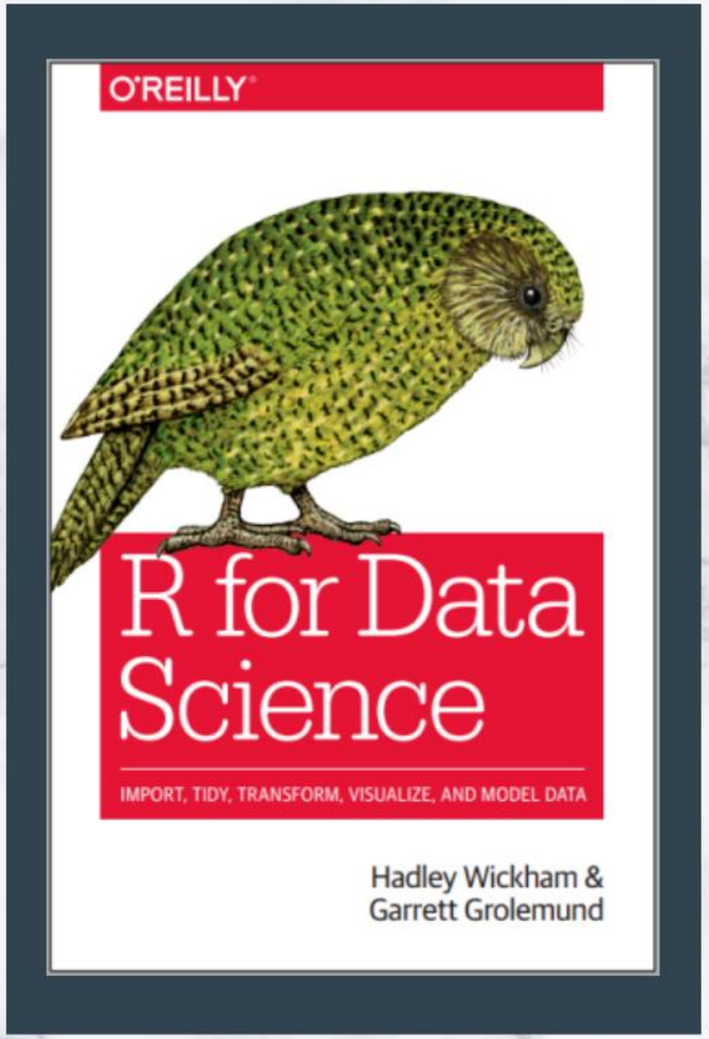
every month online on zoom

BOOK CLUB

زمان جلسه اول کلاب

پنج شنبه 6 آبان

11:00 AM



این کتاب یکی از مطرح ترین مراجع برای علوم داده است، که آموزش آن در هشت جلسه به صورت ماهیانه برگزار می شود
در بوک کلاب آن را با هم میخوانیم و آموخته هایمان را مرور می کنیم
لطفا برای شرکت در جلسات کلاب در صفحه ی میت آپ ما عضو شوید

REGISTRATION:
HTTPS://WWW.MEETUP.COM/RLADIES-URMIA/

RLADIES URMIA FOUNDERS

Nasrin Attar

Maryam Alizadeh

Why R?

Open Source

Advanced Statistical language

Outstanding Graphs

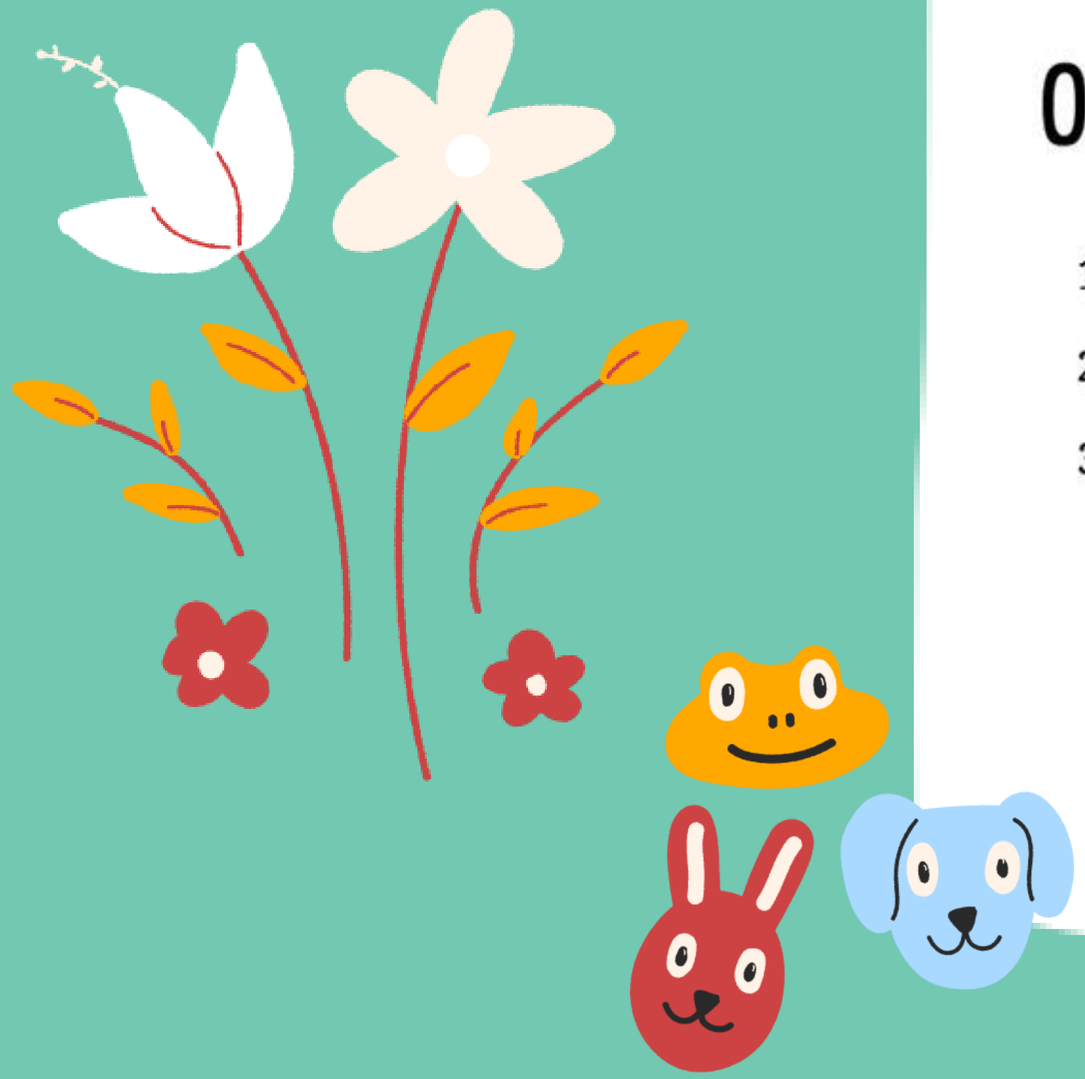
Flexible ‘n’ Fun

Extremely Comprehensive

Support Extensions

Vast Community

Relates to other languages



Outline

1. Introduction of the book
2. Questions
3. Future meetings
    - Meeting times 📅
    - Future chapter presenters 🚹

Part I. Explore

Part II. Wrangle

Part III. Program

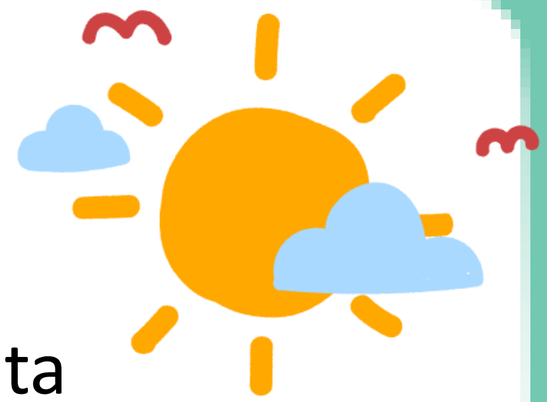
Part IV. Model

Part V. Communicate

You'll learn how to:

- **Wrangle**—transform your datasets into a form convenient for analysis
- **Program**—learn powerful R tools for solving data problems with greater clarity and ease
- **Explore**—examine your data, generate hypotheses, and quickly test them
- **Model**—provide a low-dimensional summary that captures true "signals" in your dataset
- **Communicate**—learn R Markdown for integrating prose, code, and results

BOOK ORGANIZATION

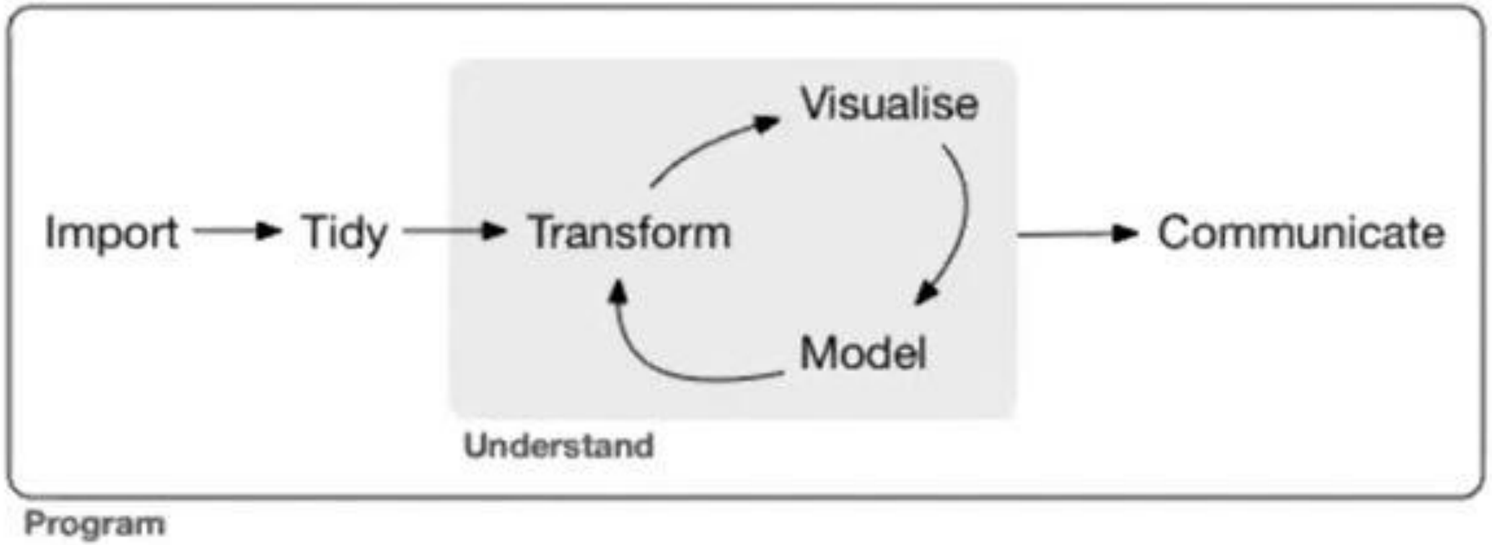


1-Visualisation and transformation of tidied data
2-How models work
3-Programming tools

- ❑ Start with some motivating examples so you can see the bigger picture, and then dive into the details
- ❑ Each section of the book is paired with exercises

What you will learn

The goal of this book is to give you a solid foundation in the most important tools.

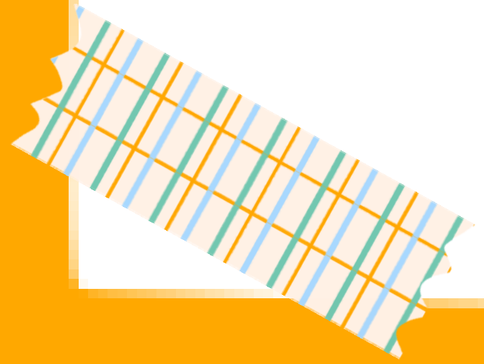


knowledge generation: visualisation and modelling

tidying and transforming are called **wrangling**

What you won't learn?

- Big data
- Python, Julia, and friends
- Non-rectangular data e.g., images, sounds, trees, and text
- Hypothesis confirmation



Prerequisites

پیش نیازها

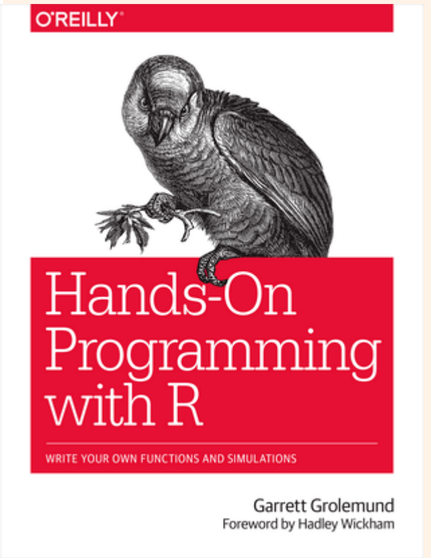
- Some programing experience [1]
- There are four things you need to run the code in this book:
  - R. go to CRAN, the comprehensive R archive network
  - RStudio. An IDE, for R programming.
  - A collection of R packages called the tidyverse.

```
install.packages("tidyverse")
library(tidyverse)
```

  - Other packages. e.g.,

```
install.packages(c("nycflights13", "gapminder", "Lahman"))
```

[1] New to programming? see Hands on Programming with R by Garrett



Getting help and learning more

- Google

  > Typically adding “R”
  > Error messages

- Stackoverflow
- Rfordatascience online community
- RStudio blog
- Twitter

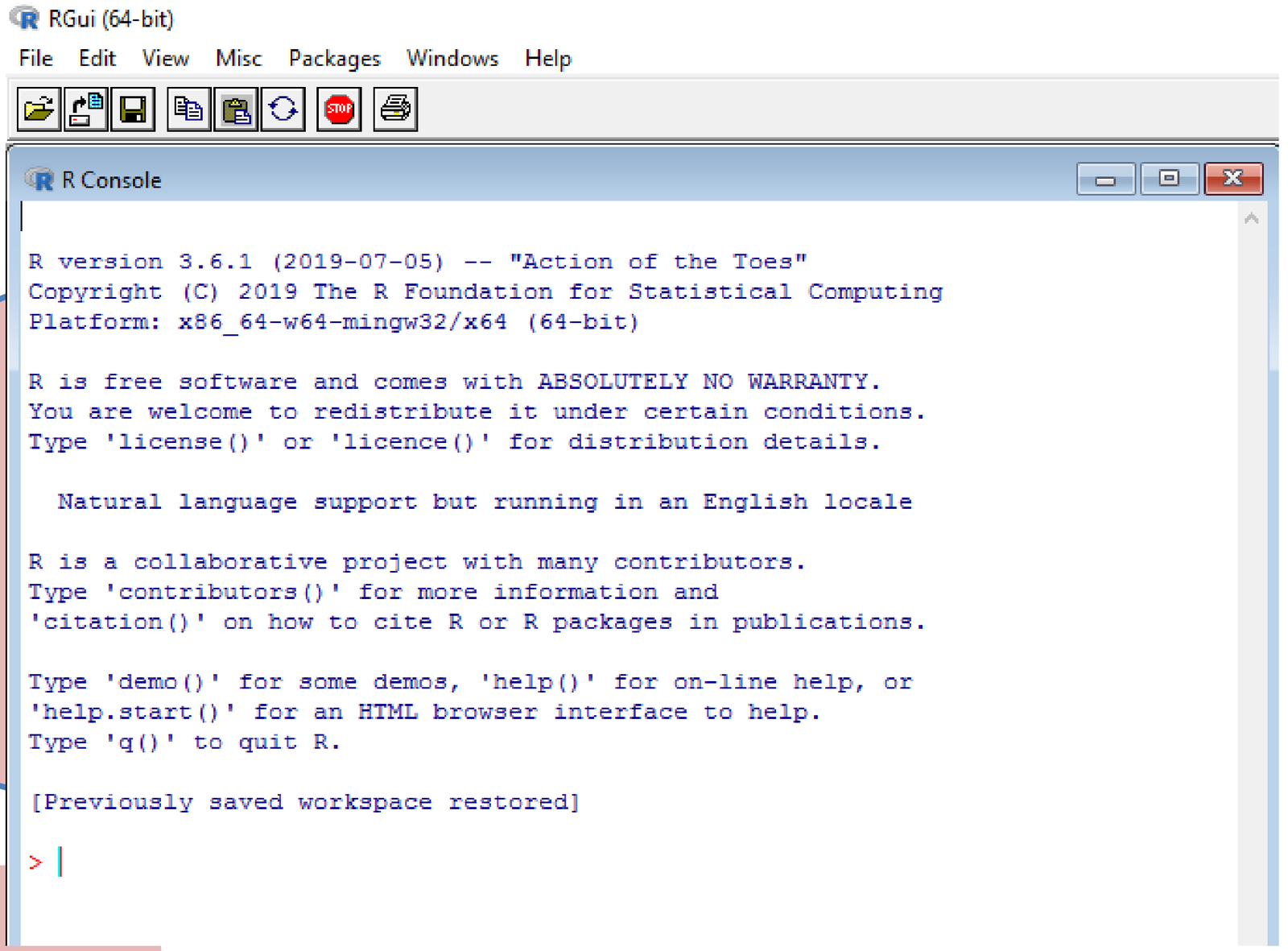
  > Hadley (@hadleywickham)
  > Garrett (@statgarrett)
  > @rstudiotips
  > #rstats

- http://www.r-bloggers.com

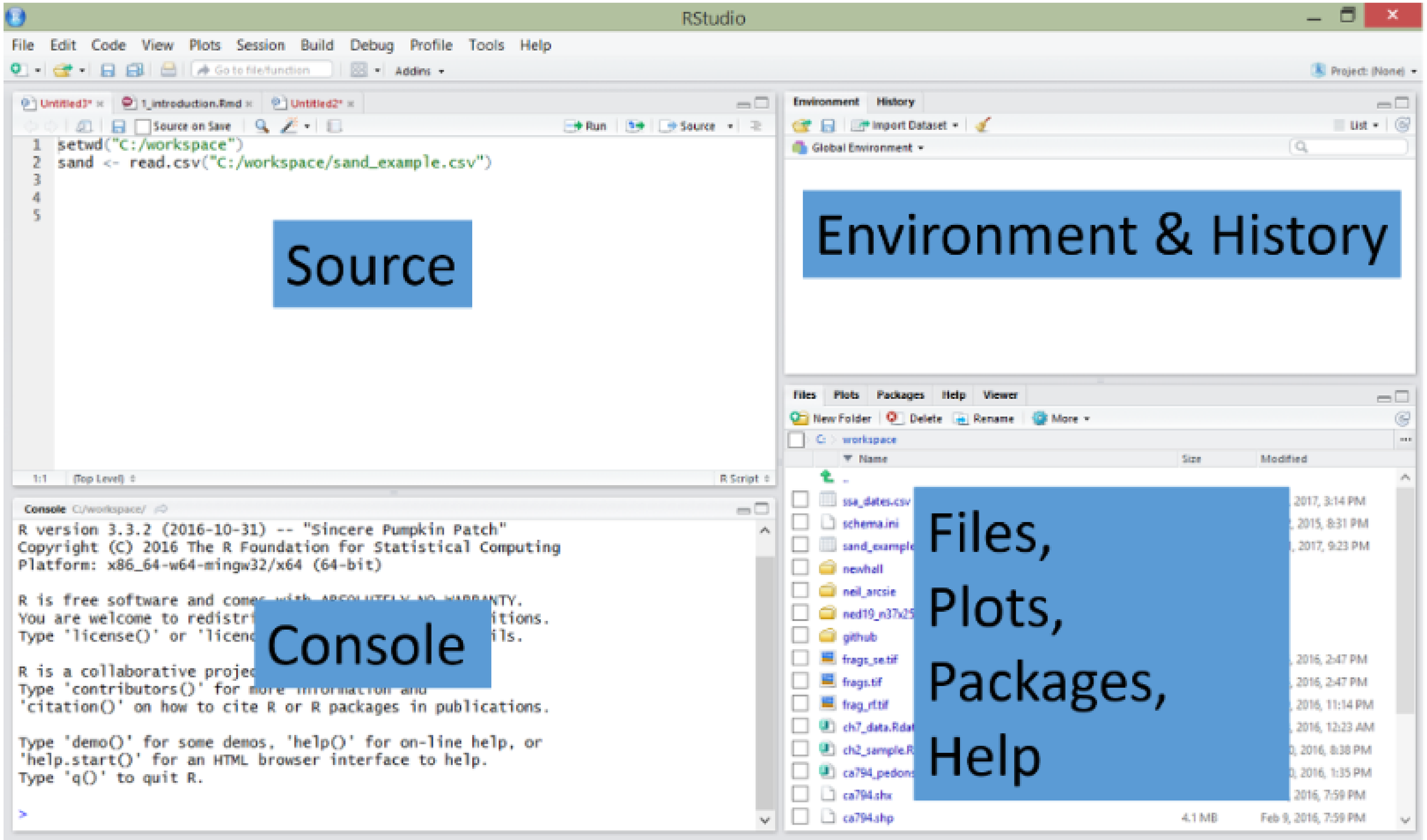
IMPORTANT SOURCES COMMUNITIES

- https://www.r-bloggers.com/
- https://stackoverflow.com/questions/tagged/r
- https://community.rstudio.com/
- https://stats.stackexchange.com/questions/tagged/r
- https://stat.ethz.ch/mailman/listinfo/r-help
- https://r-forge.r-project.org/forum/forum.php?forum_id=78&group_id=34
- https://rviews.rstudio.com/
- https://r.789695.n4.nabble.com/
- https://rladies.org/
- #rstats

R


RGui (64-bit)
File Edit View Misc Packages Windows Help
R Console
R version 3.6.1 (2019-07-05) -- "Action of the Toes"
Copyright (C) 2019 The R Foundation for Statistical Computing
Platform: x86_64-w64-mingw32/x64 (64-bit)
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.
[Previously saved workspace restored]
>

R studio


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Addins
Project: (None)
Untitled3* 1_introduction.Rmd Untitled2*
Source on Save
Run
Source
1 setwd("C:/workspace")
2 sand <- read.csv("C:/workspace/sand_example.csv")
Source
Environment History
Import Dataset
List
Global Environment
Environment & History
Files Plots Packages Help Viewer
New Folder
Delete
Rename
More
C: workspace
Name
Size
Modified
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schema.ini
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Help
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Copyright (C) 2016 The R Foundation for Statistical Computing
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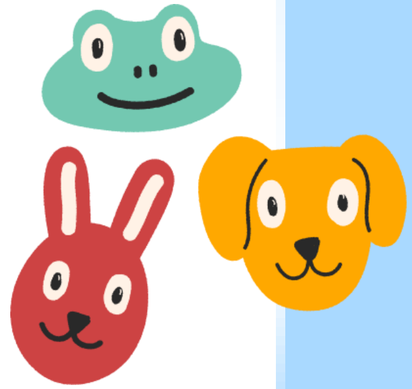
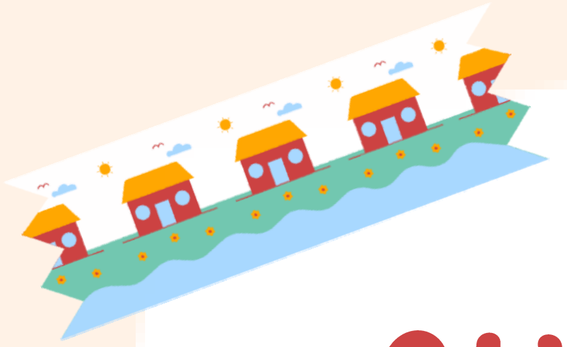
>
Console

BOOK CLUB RULES





RULE NUMBER 1

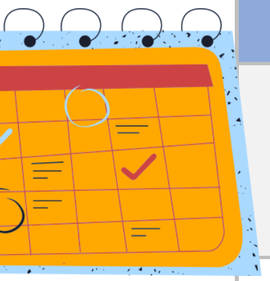
Study before each session

RULE NUMBER 2

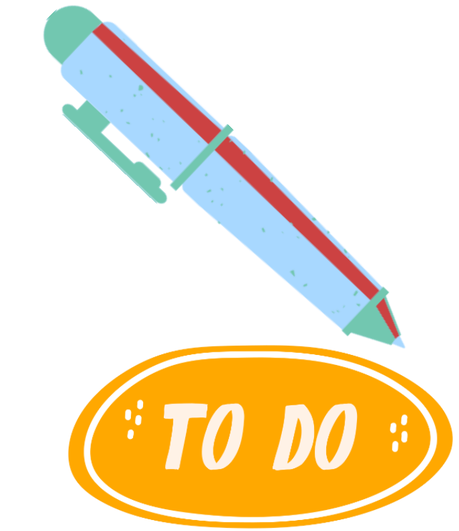
Do the exercises

RULE NUMBER 3

Plan for the sessions from now



جلسه	موضوع	Chapter	Date	تاریخ	ارائه‌دهنده
۱	Introductions to one another and to R & RStudio	Preface	28 October 2021	۶ آبان ۱۴۰۰	–
۲	Data Visualization	1,2	25 November 2021	۴ آذر ۱۴۰۰	–
۳	Data Transformation & Exploratory Data Analysis	3,4,5	23 December 2021	۲ دی ۱۴۰۰	نیازمند یک نفر داوطلب
۴	Data Importing, Tidying, and joining	6,7,8,9,10	27 January 2022	۷ بهمن ۱۴۰۰	–
۵	Dealing with Special Data Types	11,12,13	22 February 2022	۳ اسفند ۱۴۰۰	نیازمند یک نفر داوطلب
۶	Programming	14,15,16,17	March 2022	فروردین ۱۴۰۱	–
۷	Model	18,19,20	April 2022	اردیبهشت ۱۴۰۱	نیازمند یک نفر داوطلب
۸	Communicate	21,22,23,24	May 2022	خرداد ۱۴۰۱	–



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پنج شنبه اول هر ماه

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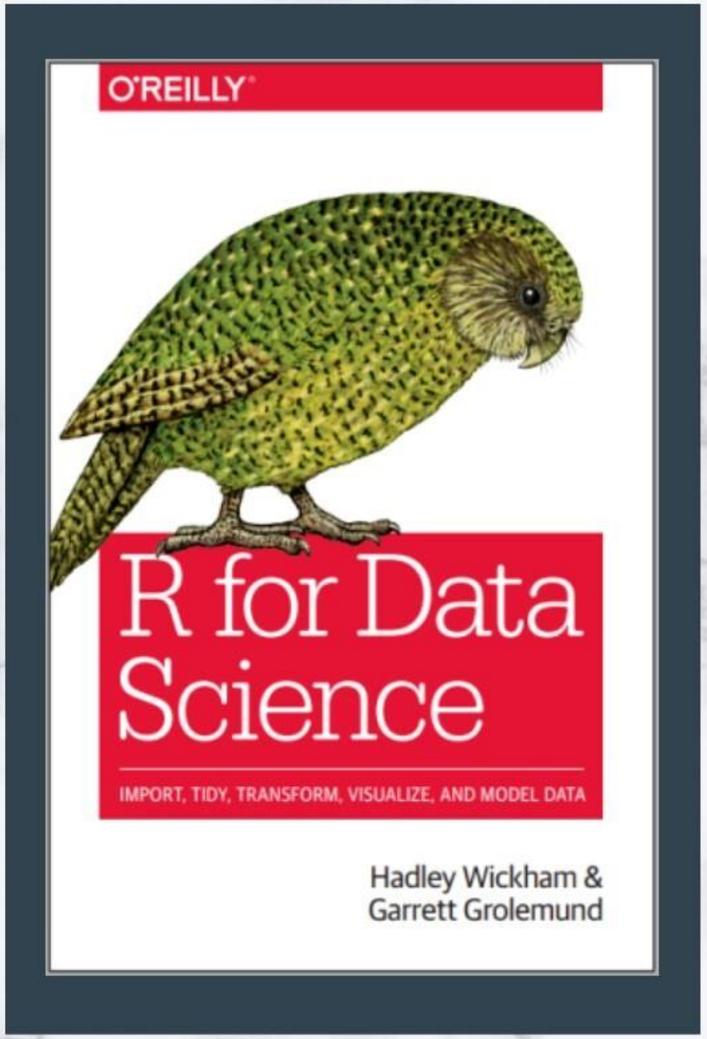

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THANK YOU FOR LISTENING!

Do you have any questions for me?