R Programming

R for Data Science workshop

2019-05-01 (updated: 2019-07-11)

R Programming

Outline

- Overview

- Vectors and lists

- Functions

- Iteration with `purrr`

Data science workflow

Image source: R for Data Science by Hadley Wickham & Garrett Grolemund.
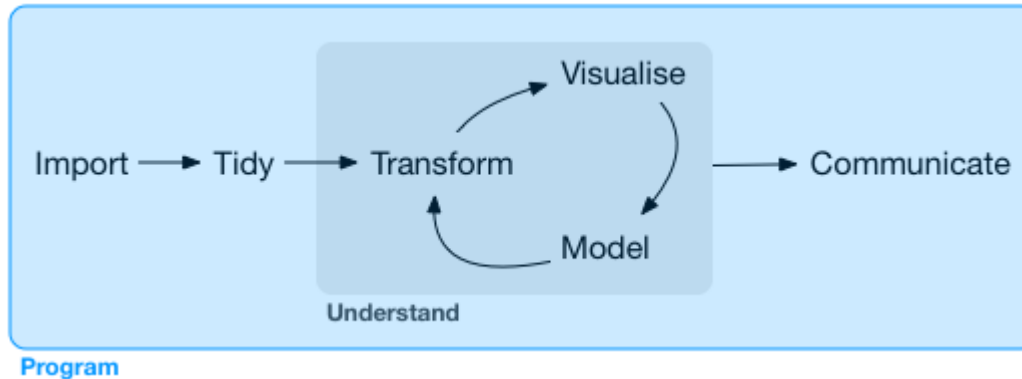
Data science workflow

Image source: R for Data Science by Hadley Wickham & Garrett Grolemund.

R Programming

Overview

- You can't do data science without a computer

- Programming produces code

- Code is a tool of communication

    - Code tells a computer what to do
    - Code communicates meaning to other humans

- Getting better at programming means getting better at communicating

Vectors and lists

- Atomic vectors (logical, numeric, character)

- Lists

- Using vectors and lists

- Attributes

- Augmented vectors (factors, dates, datetimes, tibbles)

Demos

Functions

- When should you write a function?

- Functions are for humans and computers

Not covered today

- Conditional execution

- Function arguments and return values

- much more

Demos

Iteration with `purrr`

- For loops

- For loops versus functionals

- The map functions

Demos

Your turn

R Programming

your-turn/04-r-programming.Rmd

15:00