QTM 150

Week 4 – R Basics III

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Recap

- You now know the main objects in R:

    - Numeric
    - Strings
    - Factors
    - Lists
    - Datasets

- Do you have any questions?

- **Great job!!**

- **Reminder:** There is a quiz for this class. The quiz is due Monday, 11:59 PM.

Today's Agenda

- Working directory.

- Loading datasets in your computer.

- Working with datasets.

- R Markdown.

Working directory

Working directory

- R usually works within a particular folder in your computer.

- This means that if you want to load a file that it is your computer, you need to:

  - Either find this folder
  - Or change to another folder

- We have two functions for that: `getwd()` and `setwd()`. Let's check them out?!

- **Your turn**: change the directory that your computer is working.

Loading datasets in your computer

Loading datasets in your computer

- R comes with example datasets for learning and demonstration purposes.

- To find them, type `data()`. It will pop up a list of them.

- There are also datasets online that we can use. Check out the class github page:
  https://github.com/umbertomig/qtm150

- **Your turn**: Download and open one dataset from Canvas or Github.

Working with datasets

Working with datasets

- We can use many functions to get to know our datasets:

    - `names(data_set_here)`
    - `dim(data_set_here)`
    - `summary(data_set_here)`
    - `str(data_set_here)`
    - `head(data_set_here)`

- **Your turn**: Load a dataset called USArrests and explore it. Hint: to load this dataset you should do `data(USArrests)`. To learn about it you should run `help(USArrests)`.

Working with datasets

- We can also build some simple plots:

  - `hist(data_set_here$variable_here)`
  - `boxplot(data_set_here$variable_here)`
  - `plot(data_set$variable_here, data_set$other_var)`

- **Your turn**: Make a few plots of the dataset USArrests.

R Markdown

R Markdown

- R Markdown is a way to integrate computer and stats coding with text.

- These slides that you are seeing now were build using *R Markdown*!

- Let's check out my R Markdown?

- **Your turn**: build one R markdown. Using the default template, change your name, add one paragraph, and make one extra plot than the one in the default.

Questions?

Have a great weekend!