Intro to R

With little-to-no prior experience

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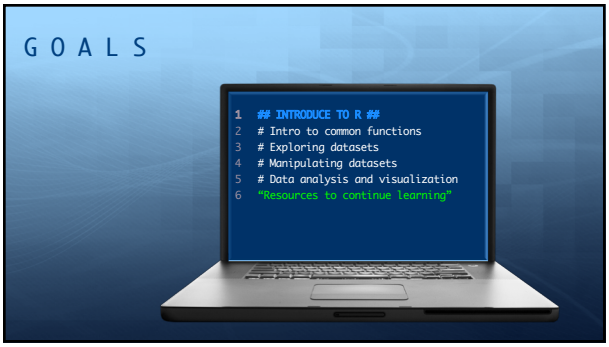
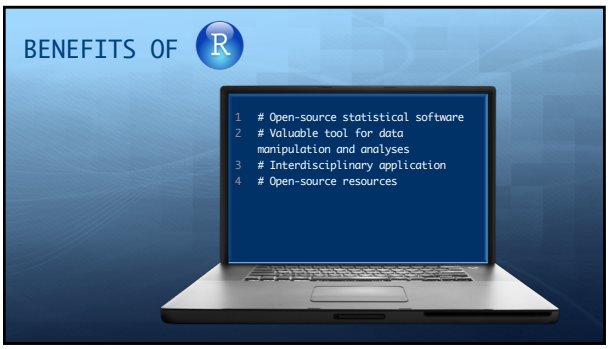
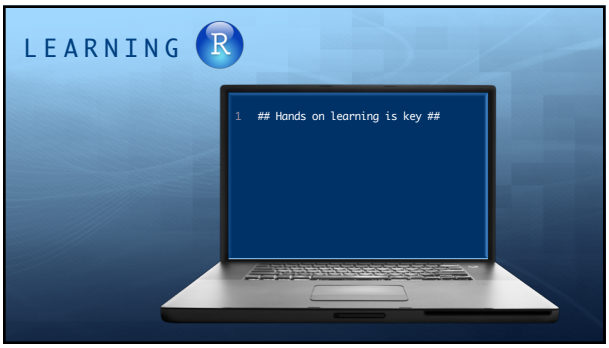
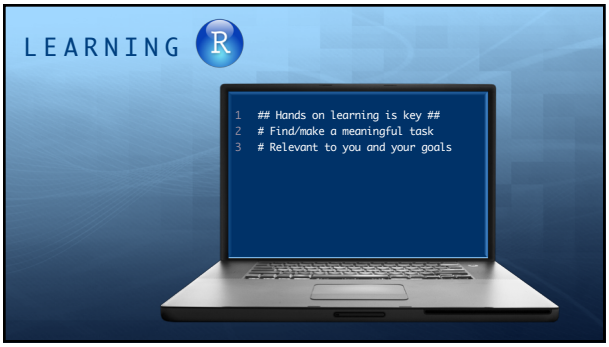
Disclaimers

+ Goal of the workshop is to INTRODUCE you to R


GOALS
INTRODUCE TO R
Intro to common functions
Exploring datasets
Manipulating datasets
Data analysis and visualization
"Resources to continue learning"


BENEFITS OF R
Open-source statistical software
Valuable tool for data manipulation and analyses
Interdisciplinary application
Open-source resources


LEARNING R
Hands on learning is key


LEARNING R
Hands on learning is key
Find/make a meaningful task
Relevant to you and your goals

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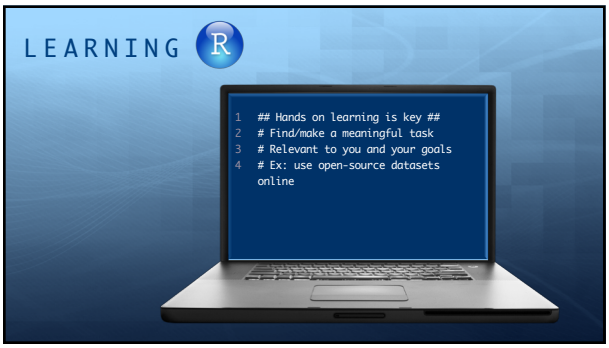
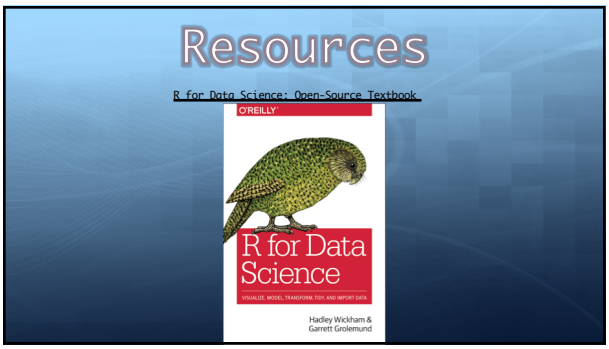
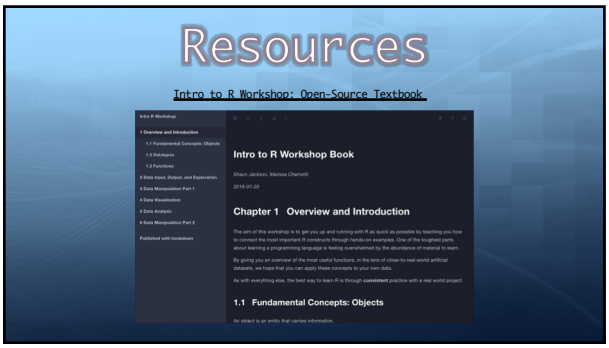
Ex: Task Tracking Project

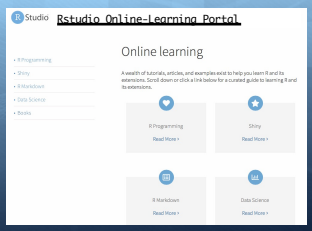

LEARNING R
Hands on learning is key
Find/make a meaningful task
Relevant to you and your goals
Ex: use open-source datasets online

kaggle
Open-source datasets via kaggle
Datasets
Health Insurance Marketplace
Mental Health in Tech Survey


Resources
R for Data Science: Open-Source Textbook
O'REILLY
R for Data Science
VISUALIZE, MODEL, TRANSFORM, TIDY, AND IMPORT DATA
Hadley Wickham &
Garrett Grolemund


Resources
Intro to R Workshop: Open-Source Textbook
Intro to R Workshop Book
Chapter 1 Overview and Introduction
1.1 Fundamental Concepts: Objects

Resources



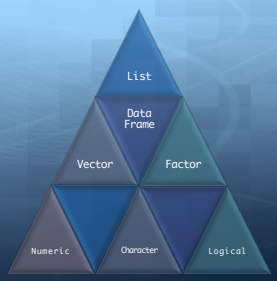
Resources

Free R Programming Courses

Intro to R for Data Science by Microsoft- Free

Data Types/Classes

classes



class: numeric

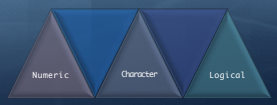
1, 2, 3, 4

class: character

String/words/qualitative

"Blue", "Green", "Yellow"

class: logical

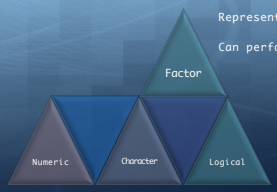


TRUE, FALSE, NA

class: Factor

Represent categorical data

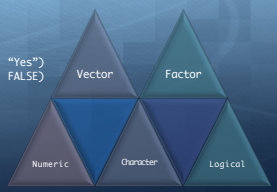
Can perform stat. operations



class: Vector

Contains data points of
1 data type

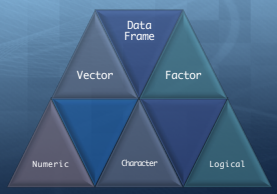
```
vect1 <- c(3, 5, 7)
vect2 <- c("Yes", "No", "Yes")
vect3 <- c(TRUE, FALSE, FALSE)
```



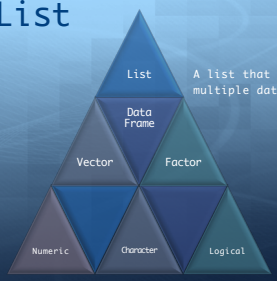
class: Data Frame

Frame containing data (csv, excel, text, etc.)

organizes data observations into (rows, columns)



class: List



A list that can contain multiple data types

Open RStudio

```
> print("hello world")
```