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R-Ladies Miami

Introductory R Hands-On Workshop





Agenda for today



**RStudio
Basic Setup**



**Theoretical
Input**



**Practical
exercises**

github.com/rladiesmiami

Wifi: CIC (no password)

Parking: Tickets will be validated downstairs



@RLadiesMiami
miami@rladies.com



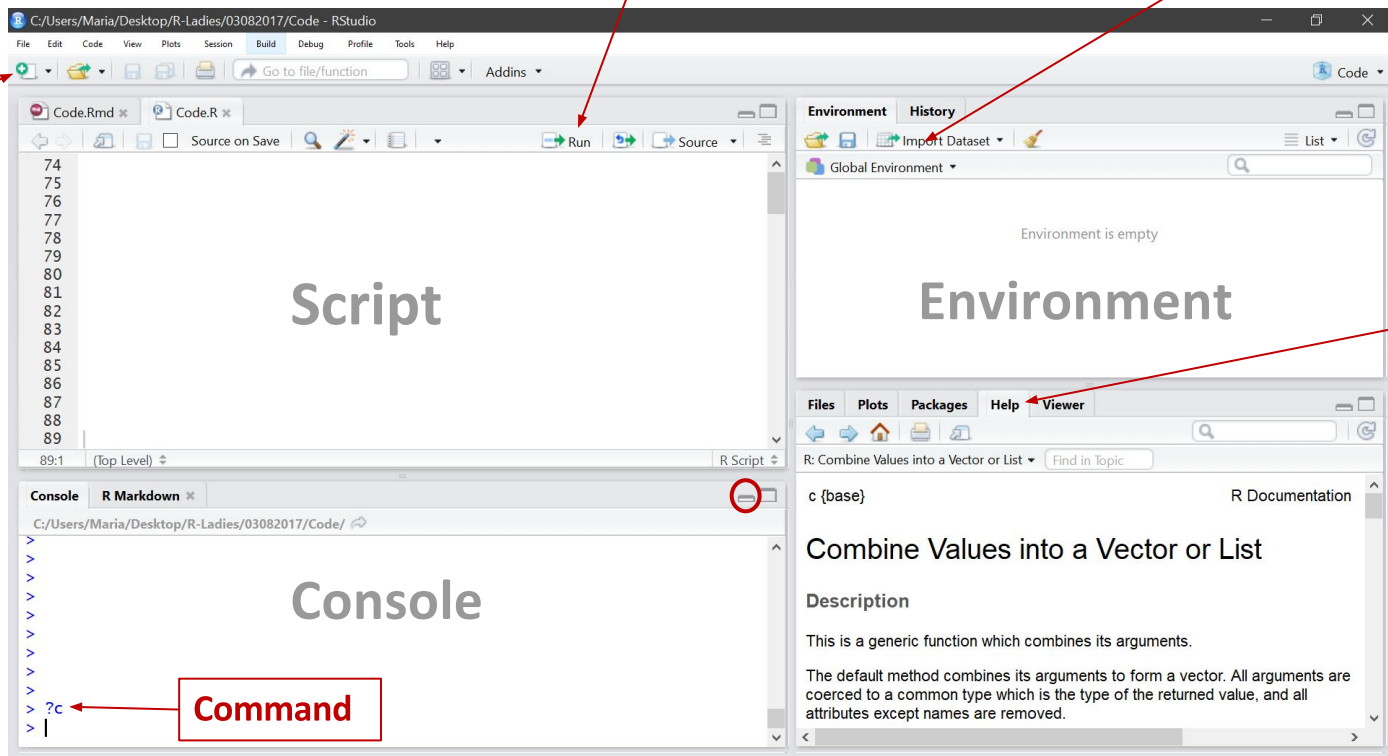
Requirements - Basic Setup

Installation Instructions:

https://github.com/rladiesmiami/Meetups/blob/master/Intro_Workshop_8.23/RLadiesMiami_PreWorkshopSetup.pdf

- Install R
Programming language (comes also with own IDE)
- Install RStudio (Make sure you have at least Version 1.0)
Most popular R IDE
- Setup Github (not mandatory for today)
Version Management

Getting Started - RStudio



New Script

Run or Cmd + Enter

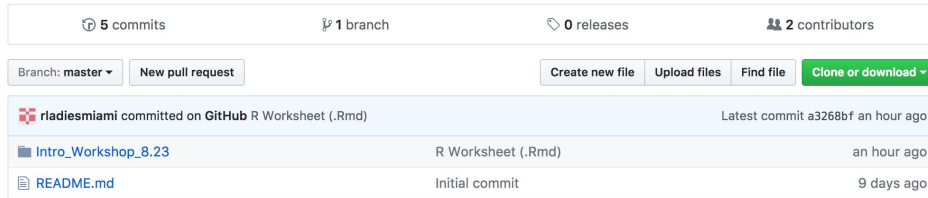
Open/Save

Help !

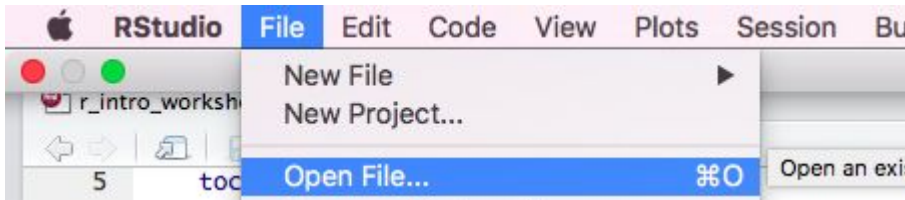
Command



Getting Started - Workshop Setup (1)



1. Go To: https://github.com/rladiesmiami/R-Intro-Meetup-823/tree/master/Intro_Workshop_8.23
2. Download and unzip the file
3. Go To RStudio: Go to File → Open File → r_intro_workshop.Rmd





Getting Started - Workshop Setup (2)

The screenshot shows the RStudio interface with the 'Preview' menu open. A purple arrow points to the 'Preview in Viewer Pane' option, which is highlighted with a purple box. The menu also includes options like 'Preview in Window', '(No Preview)', 'Preview Images and Equations', 'Show Previews Inline', 'Chunk Output Inline', 'Chunk Output in Console', 'Expand All Output', 'Collapse All Output', 'Clear Output', 'Clear All Output', and 'Output Options...'. The background code in the editor includes a date, a section header '# Part 1: Theory', and a list of basic operators.

```
5 toc: yes
6 pdf_document: default
7 date: "08.23.2017"
8 ---
9 # Part 1: Theory
10 **Basic Operators**:
11 - assignment operators: (<-, =)
12 - separation operators: (;, ) eg
13   'test.csv', sep = ''; View(test.csv)
14 - algebraic operators: (+, -, *, /)
15   operations eg. 5+7
16 - TAB: Can be used to search for files
17   read.csv(TAB). Other than that scope)
18
19 ## Assigning Values to Variables
20 You can create a variable by **assigning** it a value with
21   an assignment operator (<-, =):
22
23 - In R the left side is left for the assignment
24
25 - (<-) Is not commutative (2 <- a not allowed ; a <- 2 ==
26   2 -> a)
27
28 - (=) Commutative (a = 2; 2 = a not allowed)
```

This screenshot is similar to the previous one, showing the RStudio interface with the 'Preview' menu open. A purple arrow points to the 'Preview' button in the top toolbar, which is highlighted with a purple box. The 'Preview in Viewer Pane' option in the menu is also highlighted with a purple box. The background code in the editor is the same as in the first screenshot.

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```



Getting Started - R Intro

- Basic Operators ([<- , =], [+ , - , * , /], [:, :, TAB])
- Variables & Data types
- Important Operations
 - Open / load data (import / export)
 - Save data
 - Installing packages
 - Getting help
 - Handle data (vectors/data frames)
 - Visualize using ggplot

Events

Aug - Sept 2017



Data Science Study Group Miami

Date: Aug 24th

Location: StartHub Miami

Topic: n/a

Link: <https://www.meetup.com/Data-Science-Study-Group-South-Florida/events/242041269/>

An R Ladies Miami table will be available
Contact: Cris Vidal



Florida Panthers Analytics

Date: Sept 13th

Location: CIC Miami (tentatively)

Time: 7:00 pm

Topic: Showcasing ggplot in
Sports Analytics

Link: TBA

