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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](https://github.com/rladiesmiami)

Wifi: CIC (no password)

Parking: Tickets will be validated downstairs



@RLadiesMiami  
[miami@rladies.com](mailto:miami@rladies.com)



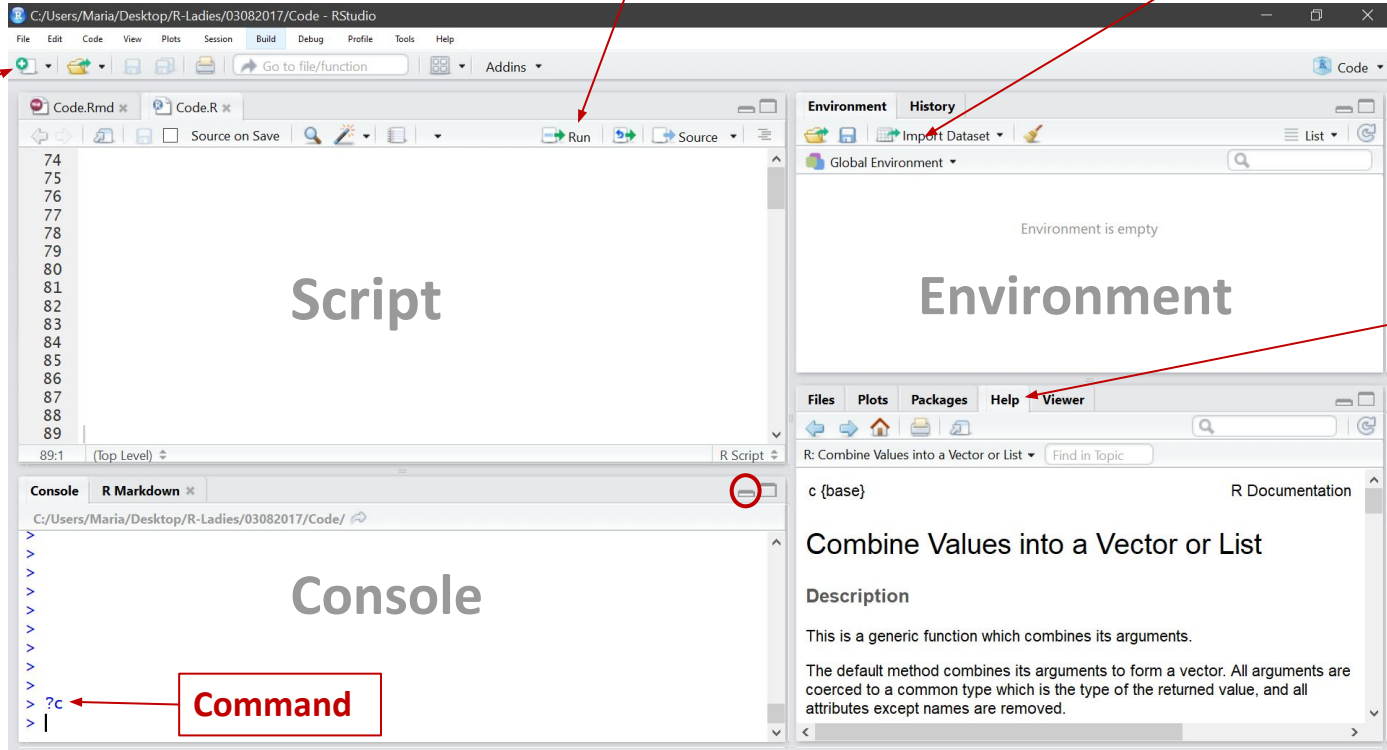
# Requirements - Basic Setup

## Installation Instructions:

[https://github.com/rladiesmiami/Meetups/blob/master/Intro\\_Workshop\\_8.23/RLadiesMiami\\_PreWorkshopSetup.pdf](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

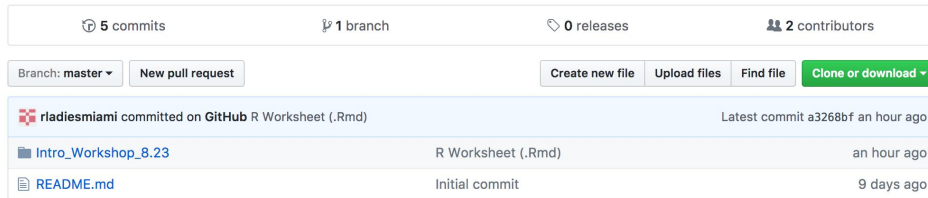
Open/Save

Help !

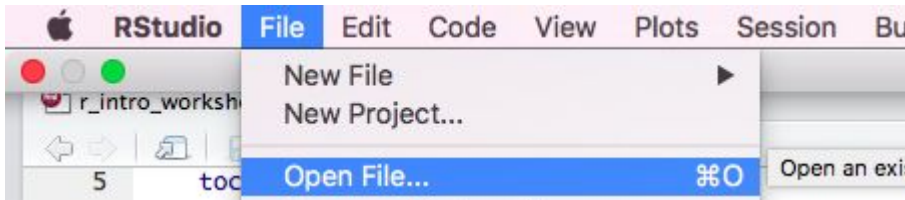
Command



# Getting Started - Workshop Setup (1)



1. Go To: [https://github.com/rladiesmiami/R-Intro-Meetup-823/tree/master/Intro\\_Workshop\\_8.23](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. The 'Preview in Viewer Pane' option is highlighted with a purple box and a purple arrow. 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 '08.23.2017', a section header '# Part 1: Theory', and a sub-header '\*\*Basic Operators\*\*'. The code lists various R operators: assignment operators (<-, =), separation operators (;, ) eg 'test.csv', sep = ''); View(test), algebraic operators (+, -, \*, /), and TAB: Can be used to search for files in a directory (read.csv(TAB)). Other than that, scope).

```
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 'test.csv', sep = ''); View(test)
13 - algebraic operators: (+, -, *, /)
14 - operations eg. 5+7
15 - TAB: Can be used to search for files in a directory (read.csv(TAB)). Other than that, scope)
16
17 ## Assigning Values to Variable
18 You can create a variable by **assigning** it a value with an assignment operator (<-, =):
19
20 - In R the left side is left for the assignment
21
22 - (<-) Is not commutative (2 <- a not allowed ; a <- 2 == 2 -> a)
23
24 - (=) Commutative (a = 2; 2 = a not allowed)
```

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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



## South Florida Panthers Analytics

Date: Sept 13th

Location: BB&T Center (tentatively)

Topic: Showcasing ggplot

Link: TBA

