

RStudio Cloud Tour



Introduction to R



Spaces

Your Workspace

Intro to Chromebook Data Science

New Space

Info

Learn

Feedback and Questions

Terms and Conditions

Your Projects

New Project



No Projects

Options



Search Projects



Sort Projects

 By name By date created

Your Workspace

Welcome to your workspace in RStudio Cloud.

Keep in mind that work you do here can be viewed by all other RStudio Cloud users. Likewise, you can see and learn from the work other users create in their workspaces.

Your Other Spaces

Intro to Chromebook Data Science

New Space

Spaces

Your Workspace

Intro to Chromebook Data Science

+ New Space

Info

Learn

Feedback and Questions

Terms and Conditions

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

R 3.4.4

Console Terminal

```
/cloud/project/ ↵  
R version 3.4.4 (2018-03-15) -- "Someone to Lean On"  
Copyright (C) 2018 The R Foundation for Statistical Computing  
Platform: x86_64-pc-linux-gnu (64-bit)
```

```
R is free software and comes with ABSOLUTELY NO WARRANTY.  
You are welcome to redistribute it under certain conditions.  
Type 'license()' or 'licence()' for distribution details.
```

```
R is a collaborative project with many contributors.  
Type 'contributors()' for more information and  
'citation()' on how to cite R or R packages in publications.
```

```
Type 'demo()' for some demos, 'help()' for on-line help, or  
'help.start()' for an HTML browser interface to help.  
Type 'q()' to quit R.
```

>

Environment History Connections

Import Dataset

Global Environment

Environment is empty

Files Plots Packages Help Viewer

More

/ cloud > project

Name	Size	Modified
..		
.Rhistory	0 B	May 14, 2018, 2:16 PM
project.Rproj	205 B	May 14, 2018, 2:16 PM

File Edit Code View Plots Session Build Debug Profile Tools Help

New File

Open File...

Recent Files

Import Dataset

Save

Save As...

Rename

Save All

Print...

Close

Close All

Close All Except Current

R Script

R Notebook

R Markdown...

Shiny Web App...

Text File

C++ File

Python File

R Sweave

R HTML

R Presentation

R Documentation

'?function()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

>

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function

R 3.4.4

Untitled1 x

Source on Save |



Run



Source



1

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Source

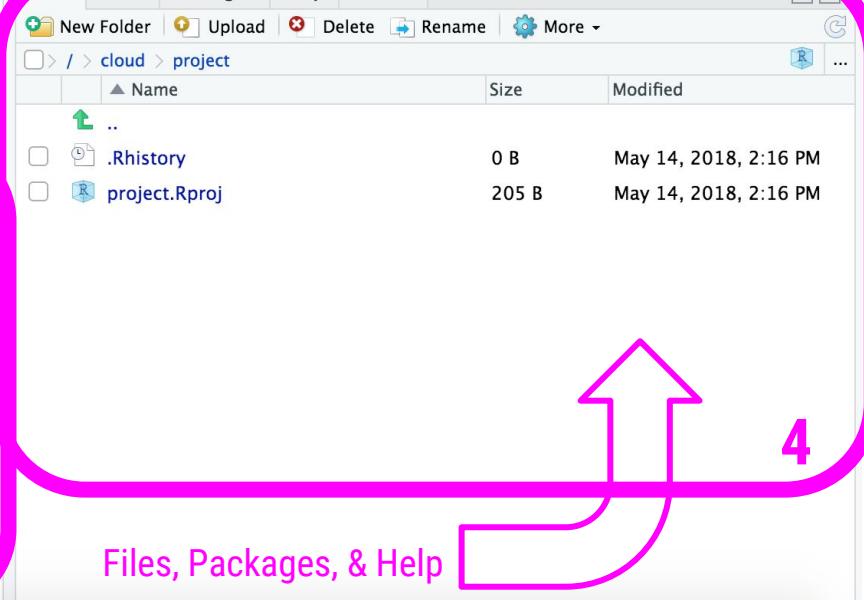
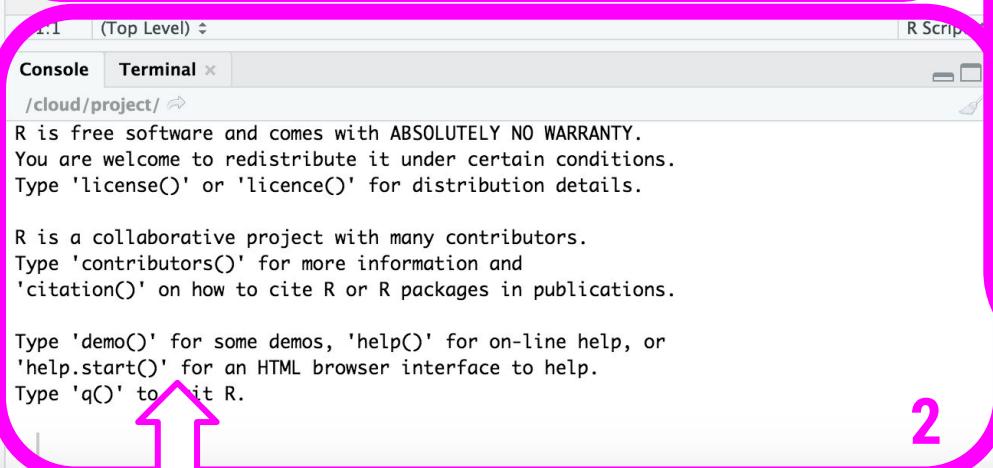
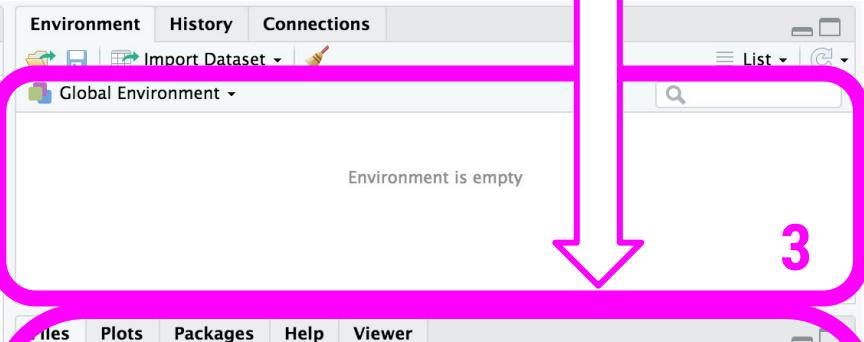
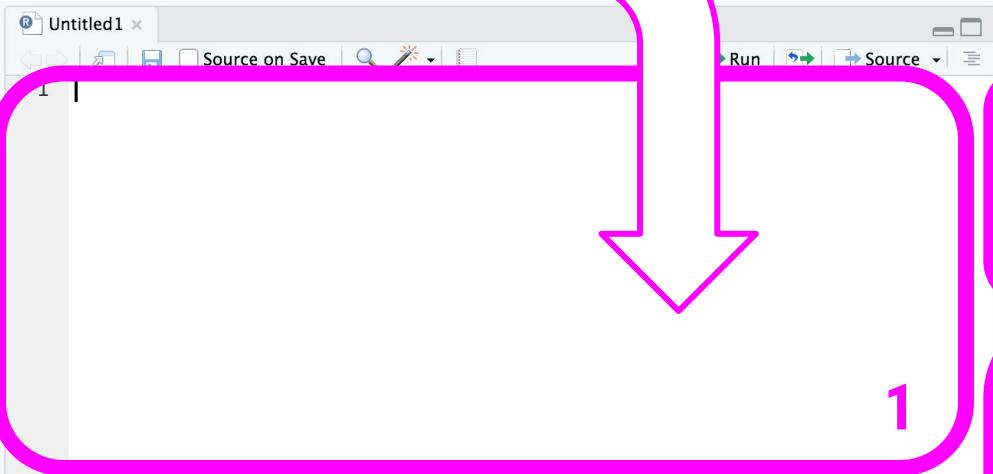
Environment

1

3

4

Console



File Edit Code View Plots Session Build Debug Profile Tools Help



New file
Open file



Save file



Change panel
organization



Run the code
you've
written

File

Edit

Code

View

Plots

S

New File

 Open File... ⌘O

Reopen with Encoding...

Recent Files

Import Dataset

 Save ⌘S

Save As...

Rename

Save with Encoding...

 Save All ⌘⌥S

 Knit Document ⌘K

 Compile Report...

 Print...

Close ⌘W

Close All ⌘W

Close All Except Current ⌘⌃W

File Edit Code View Plots Session Build Debug Profile Tools Help



R Untitled1 ×

← → | ↗ ↘ | ↕ | Source on Save

1

-  Interrupt R
-  Terminate R...
-  Restart R ⌘F10
-  Set Working Directory ▾
-  Load Workspace...
-  Save Workspace As...
-  Clear Workspace...

Run | Source ▾

1:1

(Top Level) ▾

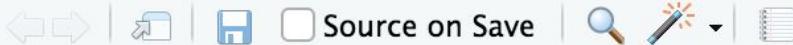
R Script ▾

File Edit Code View Plots Session Build Debug Profile

Tools Help



R Untitled1 x



1

1:1 (Top Level) ▾

R Script ▾

Install Packages...

Check for Package Updates...

Version Control

Shell...

Terminal

Addins

Keyboard Shortcuts Help ⌘K

Modify Keyboard Shortcuts...

Project Options... ⌘,

Global Options... ⌘,

Console

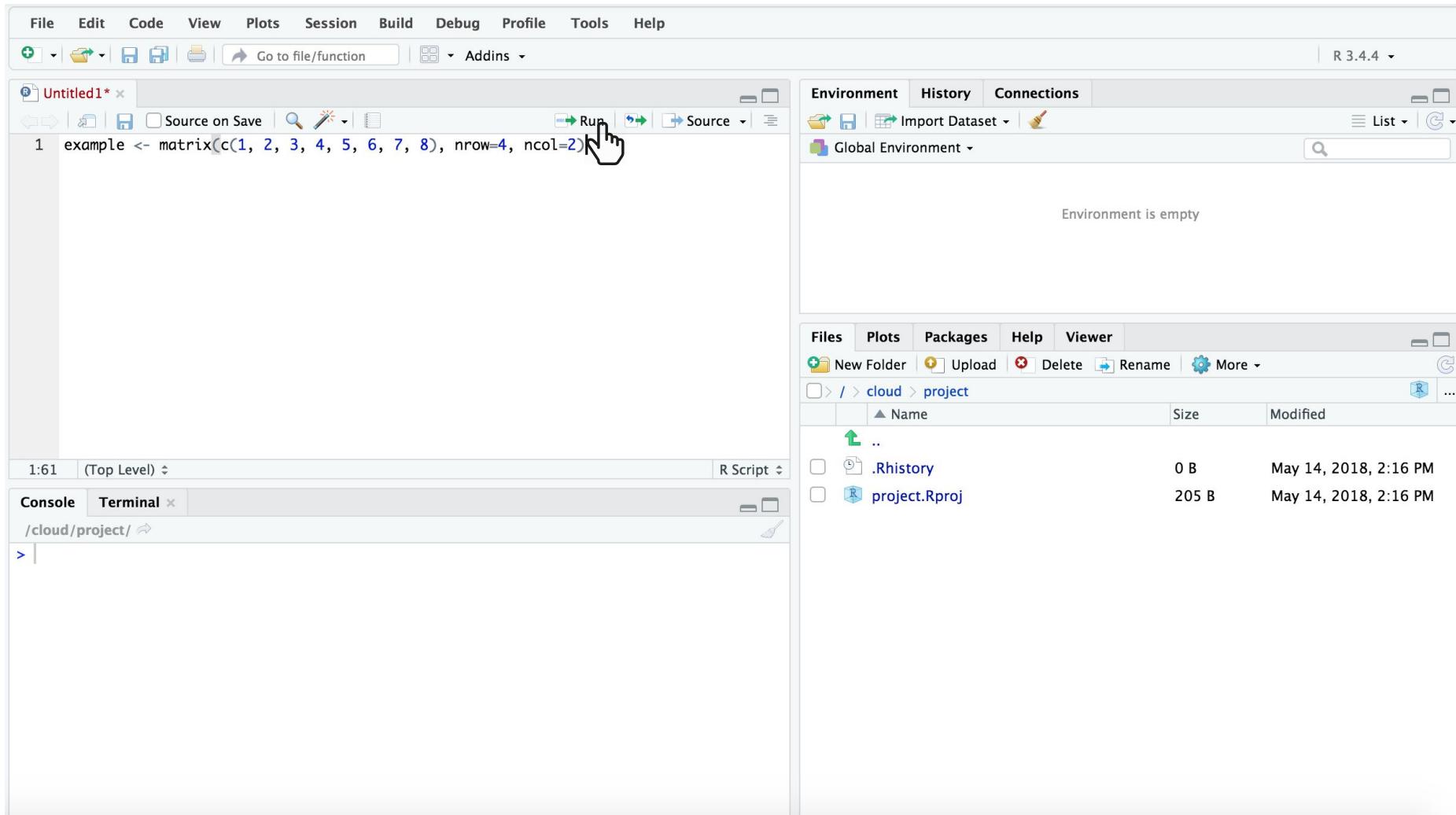
Terminal x

/cloud/project/ ↵

> 1+1

[1] 2

> |



R Untitled1* x

Source on Save | Run | Source |

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2
```

2:1 (Top Level) ▾ R Script ▾

Console Terminal x

/cloud/project/ ↵

```
> example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
> |
```

Environment History Connections

Import Dataset | Global Environment |

Data

example num [1:4, 1:2] 1 2 3 4 5 6 7 8

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

/ cloud project

	Name	Size	Modified
..			
	.Rhistory	0 B	May 14, 2018, 2:16 PM
	project.Rproj	205 B	May 14, 2018, 2:16 PM

File Edit Code View Plots Session Build Debug Profile Tools Help

+ Go to file/function

R 3.4.4 ▾

Untitled1* example

Filter

V1	V2	
1	1	5
2	2	6
3	3	7
4	4	8

Showing 1 to 4 of 4 entries

Console Terminal

/cloud/project/ ↵

```
> example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
> View(example)
> |
```

Environment History Connections

Import Dataset

Global Environment

Data

example num [1:4, 1:2] 1 2 3 4 5 6 7 8

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

cloud project

	Name	Size	Modified
..			
	.Rhistory	0 B	May 14, 2018, 2:16 PM
	project.Rproj	205 B	May 14, 2018, 2:16 PM

Untitled1* example

Filter

	V1	V2
1	1	5
2	2	6
3	3	7
4	4	8

Showing 1 to 4 of 4 entries

Console Terminal

/cloud/project/ ↗

```
> example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
> View(example)
> |
```

Environment History Connections

To Console To Source

1+1

```
example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
View(example)
```

Files Plots Packages Help Viewer

File Edit Code View Plots Session Build Debug Profile Tools Help

+ Go to file/function

R 3.4.4

Untitled1* example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2
```

Environment History Connections

To Console To Source

1+1

```
example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
```

View(example)

2:1 (Top Level) R Script

Console Terminal

/cloud/project/

>

Files Plots Packages Help Viewer

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function

R 3.4.4

Untitled1* example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
```

Environment History Connections

To Console To Source

```
1+1
example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
View(example)
```

3:1 (Top Level) R Script

Console Terminal

/cloud/project/

>

Files Plots Packages Help Viewer

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function

R 3.4.4

Untitled1* example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
```



Source on Save



Environment History Connections



To Console



To Source



1+1

```
example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
View(example)
```

3:1 (Top Level) R Script

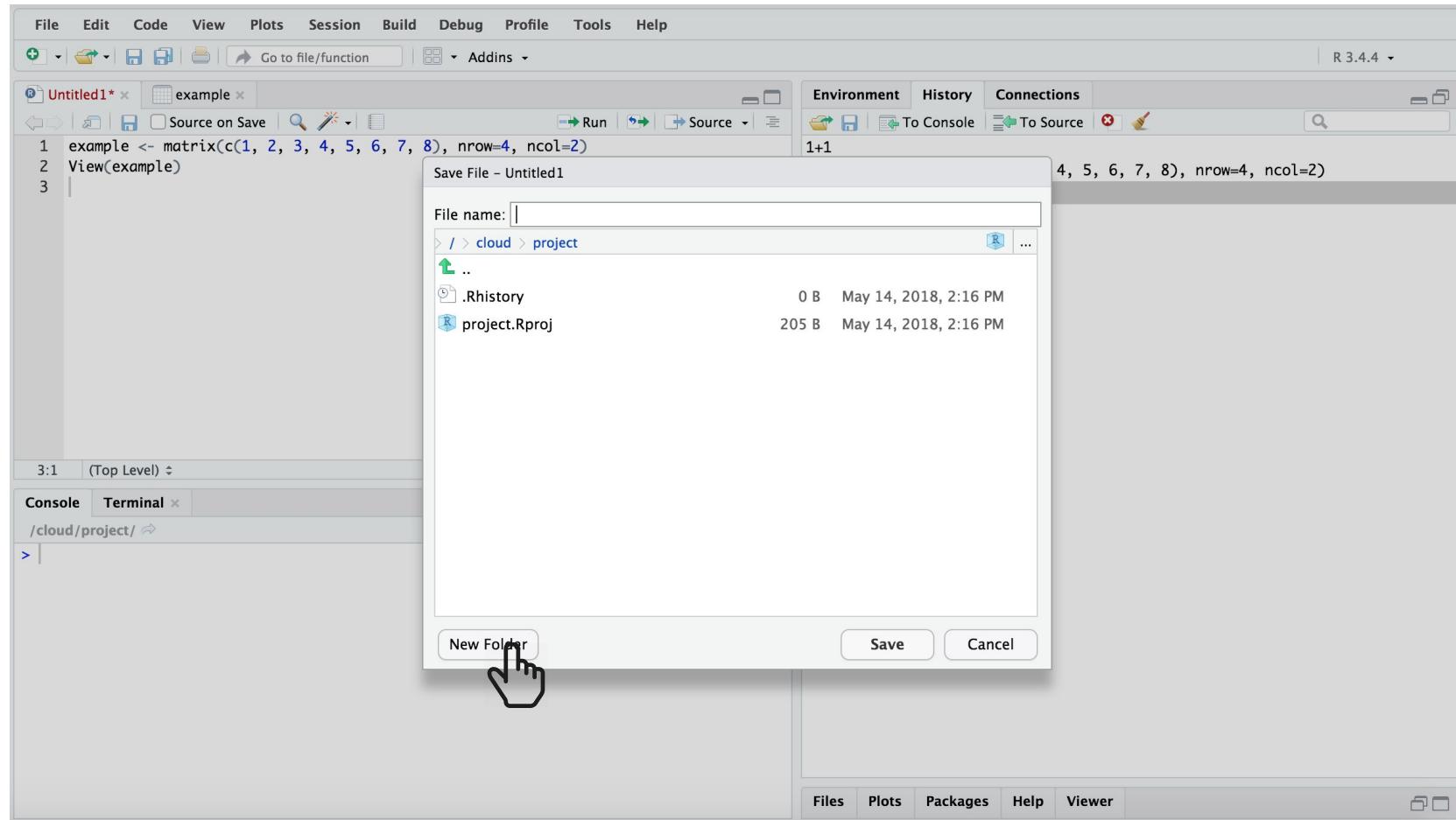
Console Terminal

/cloud/project/

>

Files Plots Packages Help Viewer





Save File – Untitled1

File name:

> / > cloud > project



...



..
.Rhistory

0 B May 14, 2018, 2:16 PM

project.Rproj

205 B May 14, 2018, 2:16 PM

New Folder

Folder name

|

OK

Cancel

New Folder

Save

Cancel

Save File – Untitled1

File name:

> / > cloud > project



...



..

.Rhistory

0 B May 14, 2018, 2:16 PM

project.Rproj

205 B May 14. 2018, 2:16 PM

New Folder

Folder name

code

OK



Cancel

New Folder

Save

Cancel

Save File - Untitled1

File name:

> / > cloud > project > code



...



New Folder

Folder name

raw_code

OK

Cancel



New Folder

Save

Cancel

Save File – Untitled1

File name: R_basics.R

> / > cloud > project > code > raw_code



...



..

New Folder

Save

Cancel



File Edit Code View Plots Session Build Debug Profile Tools Help

+ Go to file/function

R 3.4.4

R_basics.R

example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
```

3:1 (Top Level)

R Script

Console

Terminal

/cloud/project/ ↗

>

Environment History Connections

Import Dataset

Global Environment

Data

example num [1:4, 1:2] 1 2 3 4 5 6 7 8

Files

Plots

Packages

Help

Viewer

R_basics.R

example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
```

3:1 (Top Level) R Script

Console Terminal

/cloud/project/

>

Environment History Connections

Import Dataset

Global Environment

Data

example num [1:4, 1:2] 1 2 3 4 5 6 7 8

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

/ cloud project

Name	Size	Modified
..	0 B	May 14, 2018, 2:16 PM
.Rhistory	205 B	May 14, 2018, 2:16 PM
project.Rproj		
code		



The screenshot shows the RStudio interface with several panes:

- Code Editor:** Top-left pane showing an R script named "R_basics.R" with the following code:

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
```
- Environment:** Top-right pane showing the global environment with a single object "example":

example	num [1:4, 1:2]	1 2 3 4 5 6 7 8
---------	----------------	-----------------
- File Browser:** Bottom-right pane showing a file tree under "/cloud/project/code":
 - ..
 - raw_code (highlighted with a pink box and a hand cursor)
- Console:** Bottom-left pane showing the current working directory: "/cloud/project/"

R_basics.R x example x

Source on Save | Run | Source | List | C |

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
```

3:1 (Top Level) R Script

Console Terminal x

/cloud/project/ ↗

>

Environment History Connections

Import Dataset | Global Environment | List | C |

Data

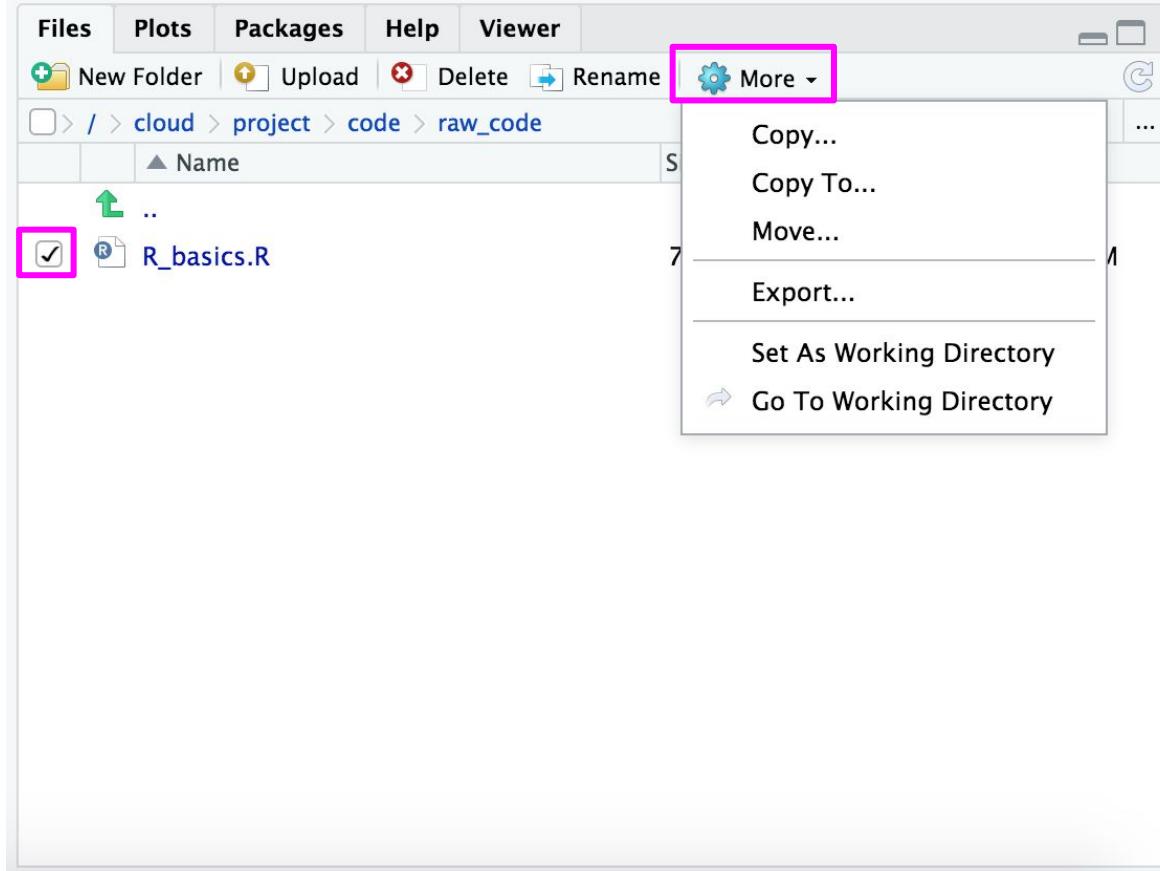
example	num [1:4, 1:2]	1 2 3 4 5 6 7 8
---------	----------------	-----------------

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

/ cloud project code raw_code

Name	Size	Modified
..		
R_basics.R	75 B	May 14, 2018, 2:39 PM



R basics.R*

example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
4 plot(wt ~ mpg, data=mtcars)
5
```

Running the code sends it to the console

Console Terminal

```
/cloud/project/ ↗
> example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
> plot(wt ~ mpg, data=mtcars)
```

The plot() function generates a plot.

Environment History Connections

Import Dataset

Global Environment

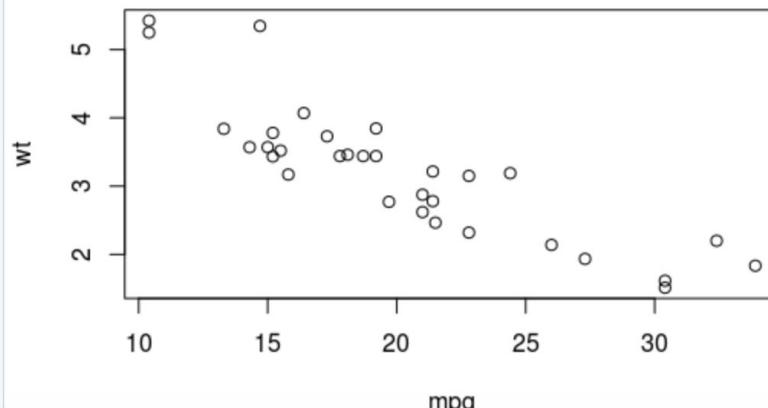
Data

example	num [1:4, 1:2] 1 2 3 4 5 6 7 8
---------	--------------------------------

Files Plots Packages Help Viewer

Zoom Export

Plot showing weight (wt) versus miles per gallon (mpg) for the mtcars dataset. The plot shows a negative correlation, where lower weight is associated with higher miles per gallon.



R_basics.R* example

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
4 plot(wt ~ mpg, data=mtcars)
5
```

5:1 (Top Level) R Script

Console Terminal

```
/cloud/project/ 
> example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
> plot(wt ~ mpg, data=mtcars)
>
```

Environment History Connections

Files Plots Packages Help Viewer

Install Update Packrat

Name	Description	Version
System Library		
boot	Bootstrap Functions (Originally by Angelo Canty for S)	1.3-20
class	Functions for Classification	7.3-14
cluster	"Finding Groups in Data": Cluster Analysis Extended Rousseeuw et al.	2.0.6
codetools	Code Analysis Tools for R	0.2-15
compiler	The R Compiler Package	3.4.4
<input checked="" type="checkbox"/> datasets	The R Datasets Package	3.4.4
foreign	Read Data Stored by 'Minitab', 'S', 'SAS', 'SPSS', 'Stata', 'Systat', 'Weka', 'dBase', ...	0.8-69
<input checked="" type="checkbox"/> graphics	The R Graphics Package	3.4.4
<input checked="" type="checkbox"/> grDevices	The R Graphics Devices and Support for Colours and Fonts	3.4.4
grid	The Grid Graphics Package	3.4.4
KernSmooth	Functions for Kernel Smoothing Supporting Wand & Jones (1995)	2.23-15
lattice	Trellis Graphics for R	0.20-35
MASS	Support Functions and Datasets for Venables and Ripley's MASS	7.3-49
Matrix	Sparse and Dense Matrix Classes and Methods	1.2-12
<input checked="" type="checkbox"/> methods	Formal Methods and Classes	3.4.4
mgcv	Mixed GAM Computation Vehicle with Automatic Smoothness Estimation	1.8-23
nlme	Linear and Nonlinear Mixed Effects Models	3.1-131.1
nnet	Feed-Forward Neural Networks and Multinomial Log-Linear Models	7.3-12

The screenshot shows the RStudio IDE interface. In the top-left corner, there are two tabs: "R_basics.R*" and "example". Below the tabs, the main workspace displays the following R code:

```
1 example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
2 View(example)
3
4 plot(wt ~ mpg, data=mtcars)
5
```

Below the code editor, the status bar indicates "5:1 (Top Level) R Script". Underneath the status bar, there are two tabs: "Console" and "Terminal". The "Console" tab is active, showing the command history:

```
/cloud/project/
> example <- matrix(c(1, 2, 3, 4, 5, 6, 7, 8), nrow=4, ncol=2)
> plot(wt ~ mpg, data=mtcars)
>
```

The screenshot shows the "Help" menu of RStudio expanded. A hand cursor is pointing at the "Help" tab in the top navigation bar. The "Help" menu contains several sections:

- R Resources**
 - [Learning R Online](#)
 - [CRAN Task Views](#)
 - [R on StackOverflow](#)
 - [Getting Help with R](#)
- RStudio**
 - [RStudio IDE Support](#)
 - [RStudio Community Forum](#)
 - [RStudio Cheat Sheets](#)
 - [RStudio Tip of the Day](#)
 - [RStudio Packages](#)
 - [RStudio Products](#)
- Manuals**
 - [An Introduction to R](#)
 - [Writing R Extensions](#)
 - [R Data Import/Export](#)
- Reference**
 - [Packages](#)
 - [Search Engine & Keywords](#)
- Miscellaneous Material**
 - [About R](#)
 - [Authors](#)
 - [FAQ](#)
 - [License](#)
 - [NEWS](#)
 - [Resources](#)
 - [Thanks](#)
 - [User Manuals](#)
 - [Technical papers](#)



Spaces

Your Workspace

CBDS Final Project

Chromebook Data Science

Data Visualization Project

Intro to Chromebook Data Science

Reports

New Space

Learn

Guide

Primers

DataCamp Courses

Cheat Sheets

Feedback and Questions

All Projects

New Project

dataviz_project

Shannon Ellis

Created Sep 5, 2018 10:41 AM

Copy

data_tidying_project

Shannon Ellis

Created Sep 5, 2018 10:40 AM

Copy

final_project

Shannon Ellis

Created Sep 5, 2018 10:42 AM

Copy

leanpub_project

Shannon Ellis

Created Sep 5, 2018 11:08 AM

Copy

swirl

Copy

Options

Search Projects

List Projects

- All
- Shared with everyone
- Yours

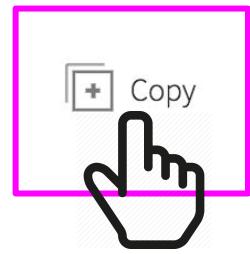
Sort Projects

- By name
- By date created

swirl



Created Sep 5, 2018 12:07 PM



Console

Terminal ×

Jobs ×



/cloud/project/ ↗



> library(swirl)

| Hi! Type swirl() when you are ready to begin.

> swirl()

| Welcome to swirl! Please sign in. If you've been here before, use the same name
| as you did then. If you are new, call yourself something unique.

What shall I call you? Jane



Console

Terminal ×

Jobs ×



/cloud/project/ ↗



I Thanks, Jane. Let's cover a couple of quick housekeeping items before we begin our first lesson. First of all, you should know that when you see '...', that means you should press Enter when you are done reading and ready to continue.

... <-- That's your cue to press Enter to continue

I Also, when you see 'ANSWER:', the R prompt (>), or when you are asked to select from a list, that means it's your turn to enter a response, then press Enter to continue.

Select 1, 2, or 3 and press Enter

1: Continue.

2: Proceed.

3: Let's get going!

Console

Terminal x

Jobs x



/cloud/project/ ↗

Select 1, 2, or 3 and press Enter

- 1: Continue.
- 2: Proceed.
- 3: Let's get going!

Selection: 2

| You can exit swirl and return to the R prompt (>) at any time by
| pressing the Esc key. If you are already at the prompt, type bye() to
| exit and save your progress. When you exit properly, you'll see a short
| message letting you know you've done so.

| When you are at the R prompt (>):
| -- Typing skip() allows you to skip the current question.
| -- Typing play() lets you experiment with R on your own; swirl will
| ignore what you do...
| -- UNTIL you type nxt() which will regain swirl's attention.
| -- Typing bye() causes swirl to exit. Your progress will be saved.
| -- Typing main() returns you to swirl's main menu.
| -- Typing info() displays these options again.

| Let's get started!

...

| Please choose a course, or type 0 to exit swirl.

- 1: CBDS Introduction to R
- 2: Take me to the swirl course repository!

Selection:





Studio Cloud

