

# RStudio Cloud

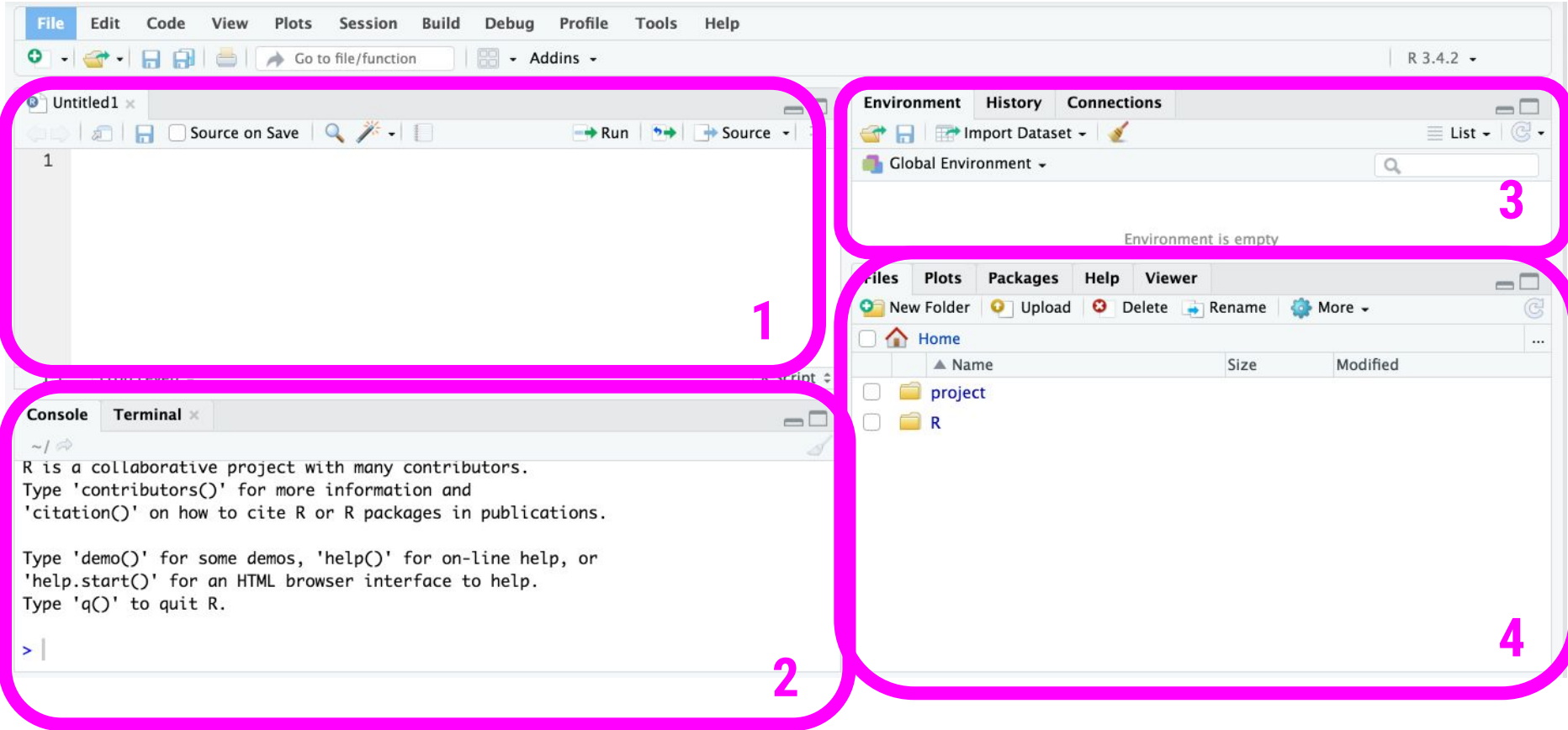


Introduction to Chromebook Data Science

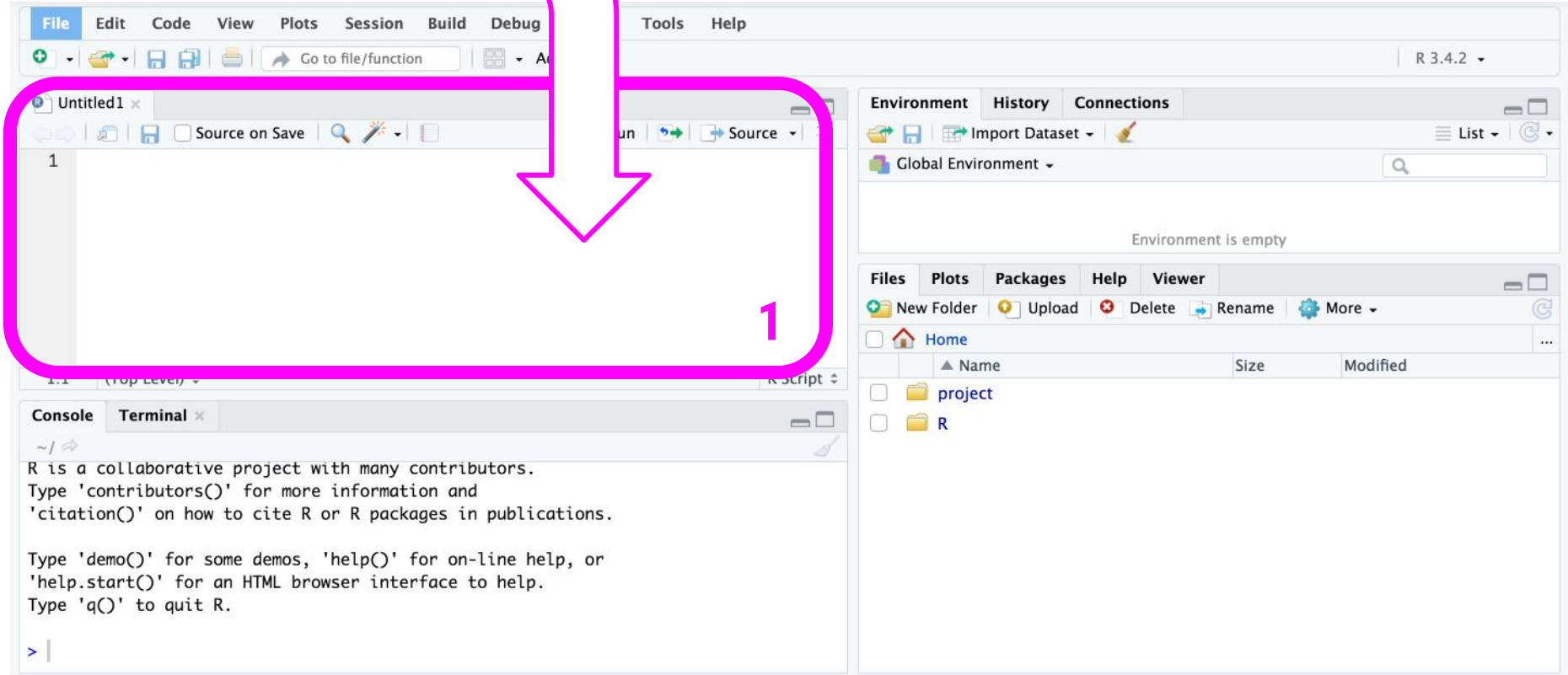


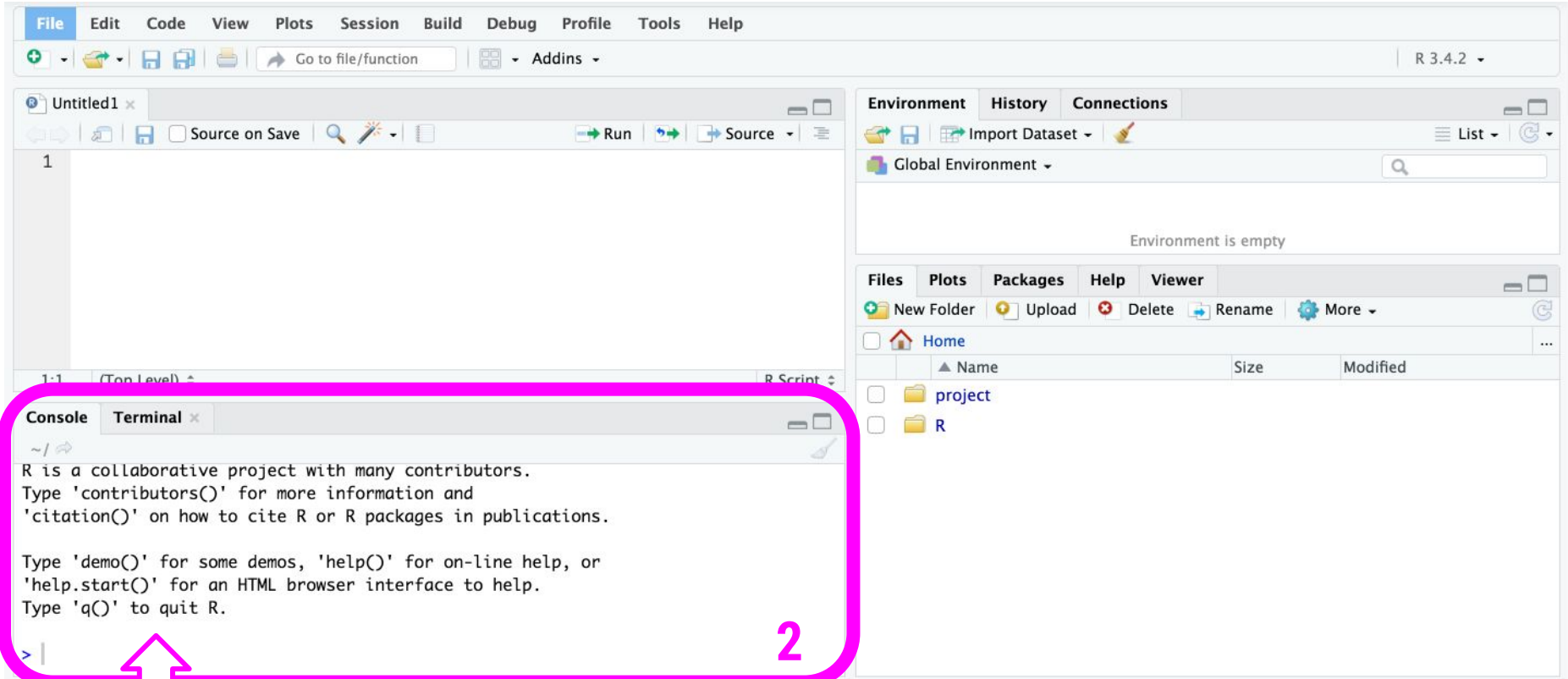
Studio Cloud





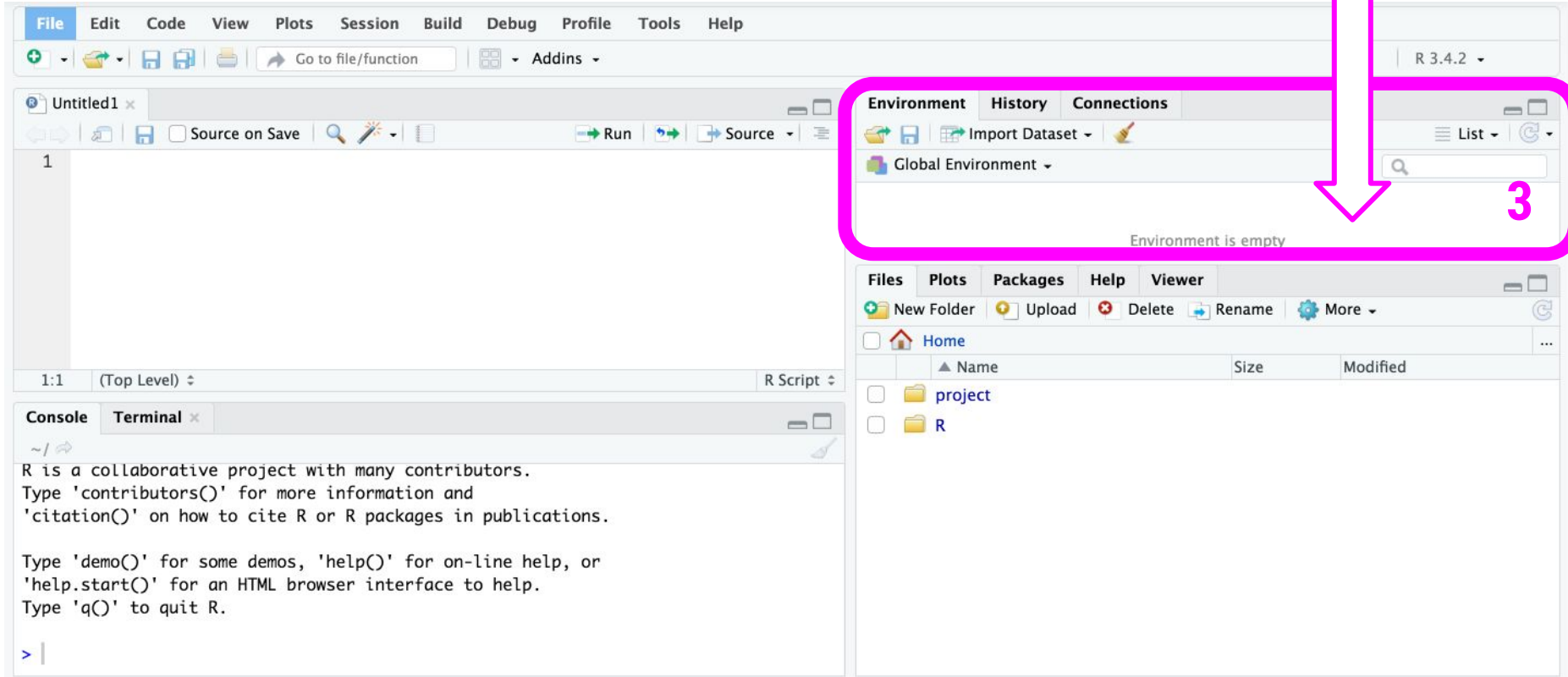
This opens up a new  
place where your  
code will be typed.

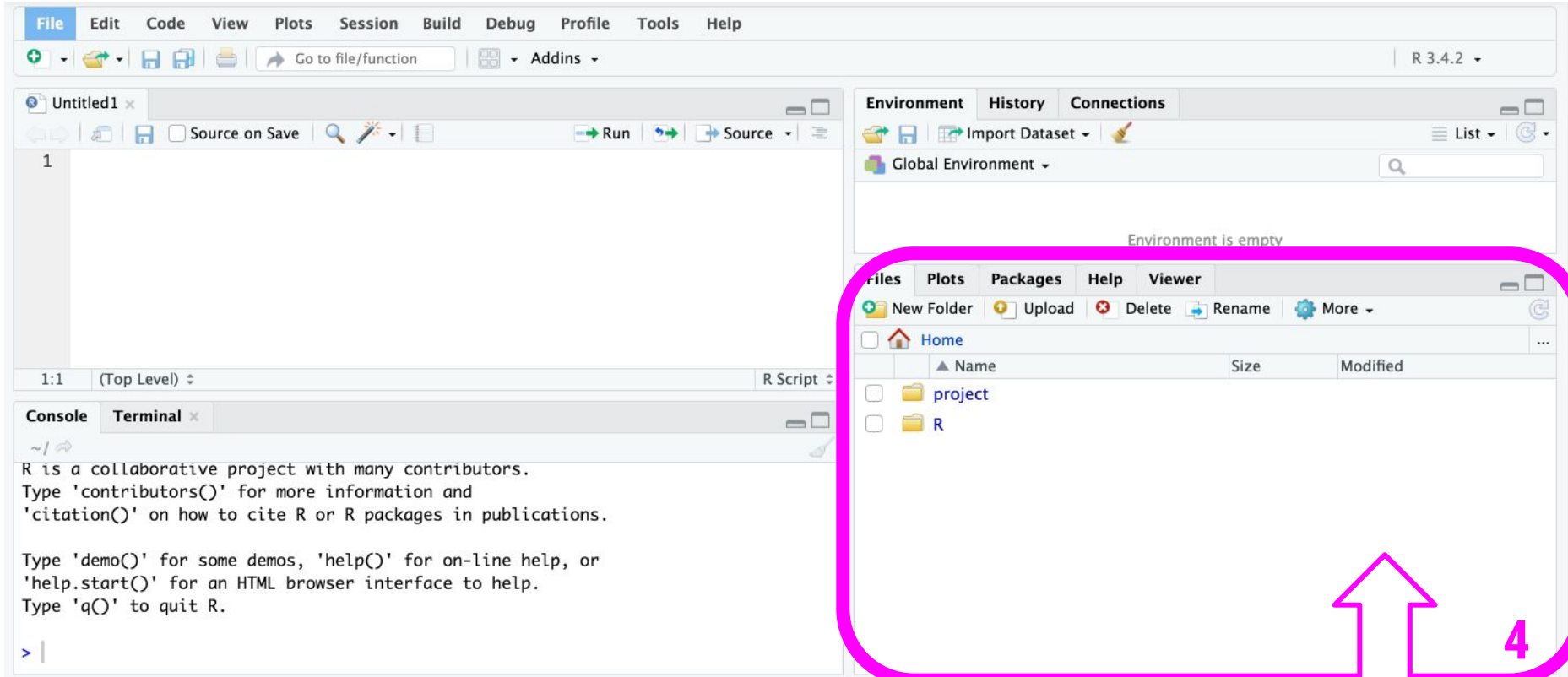




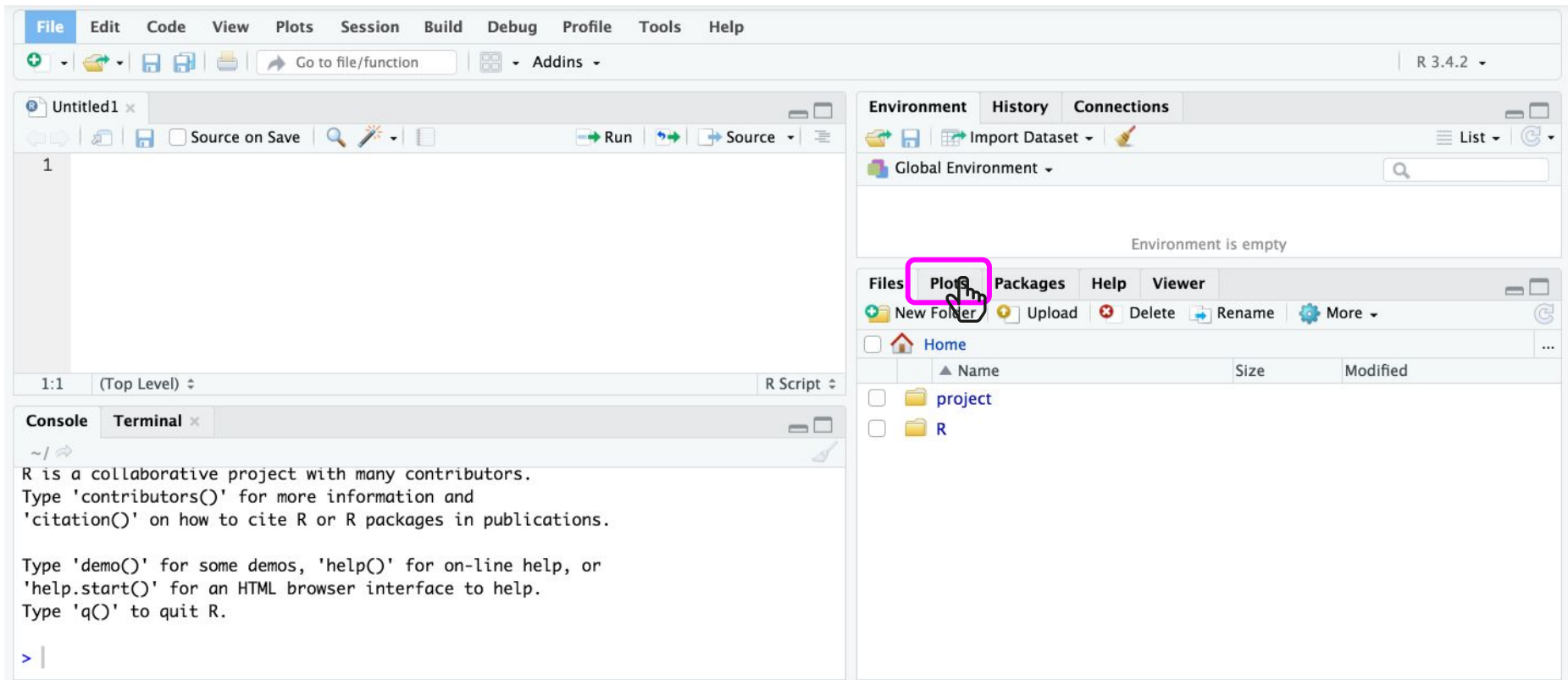
Down here is where your  
code is sent to run

The objects created by your analysis will be here. We'll talk about what that means later

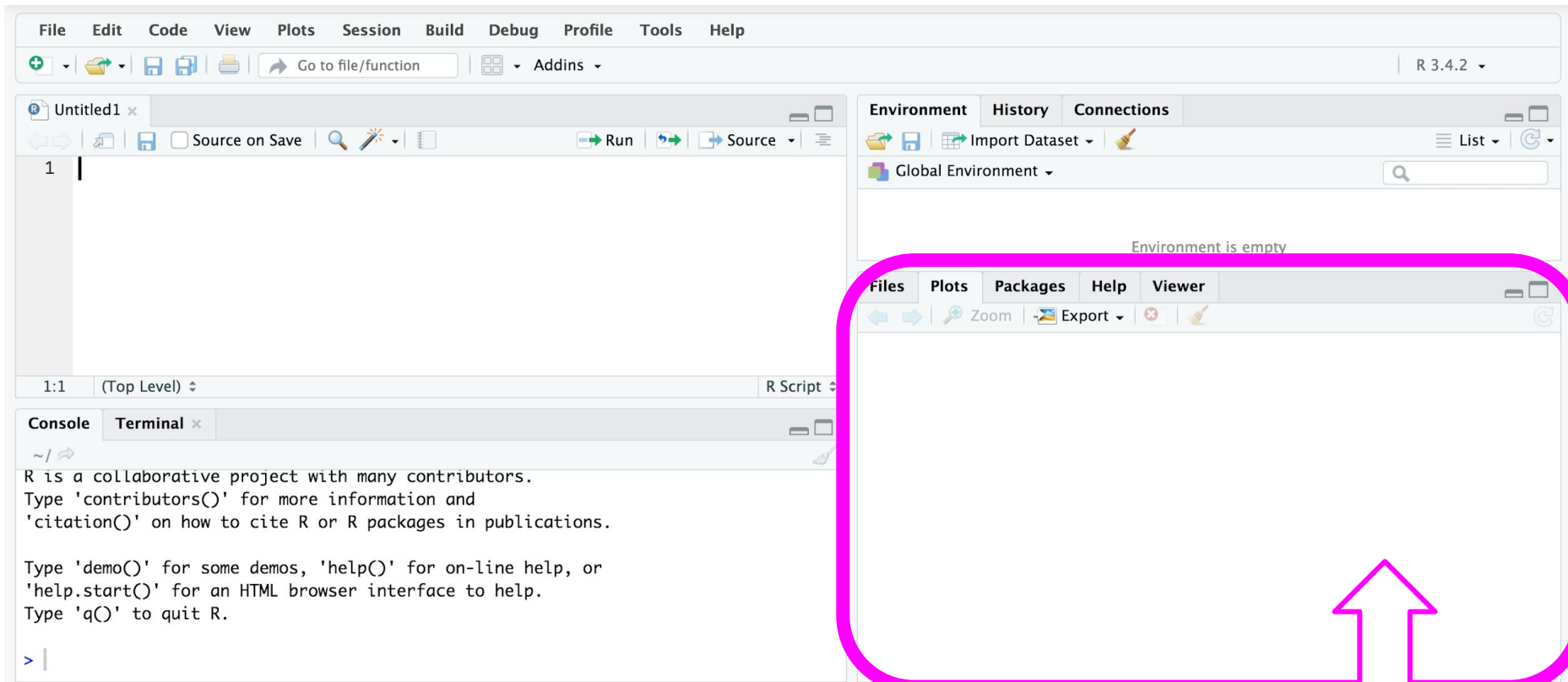




In here is where you will  
see all the files that are  
part of your project







Plots you generate will  
show up in here under the  
'Plots' tab!

## Project Question:

“How does the price of a bestselling book relate to how much the author is charging for that book?”



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

[dataviz\\_project](#)

? Shannon Ellis

Created Sep 5, 2018 10:41 AM

[data\\_tidying\\_project](#)

? Shannon Ellis

Created Sep 5, 2018 10:40 AM

[final\\_project](#)

? Shannon Ellis

Created Sep 5, 2018 10:42 AM

[leanpub\\_project](#)

? Shannon Ellis

Created Sep 5, 2018 11:08 AM

New Project



+ Copy

Options



Search Projects



List Projects

- ☒ All
- ☐ Shared with everyone
- ☐ Yours

Sort Projects

- ☒ By name
- ☐ By date created

+ Copy

+ Copy

+ Copy

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New Project



Copy

Copy

Copy

Copy

Options



Search Projects

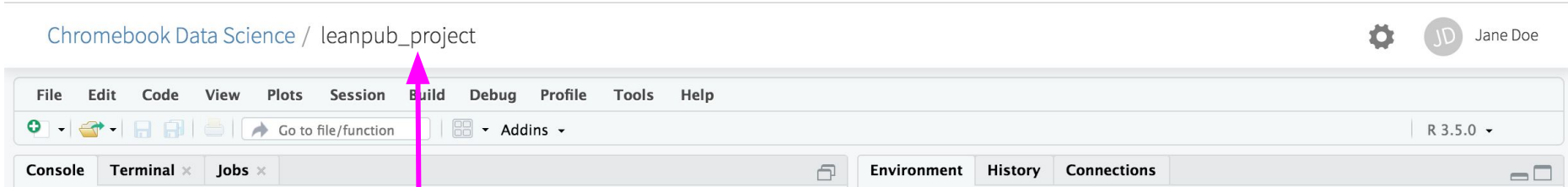
List Projects

- ☒ All
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Sort Projects

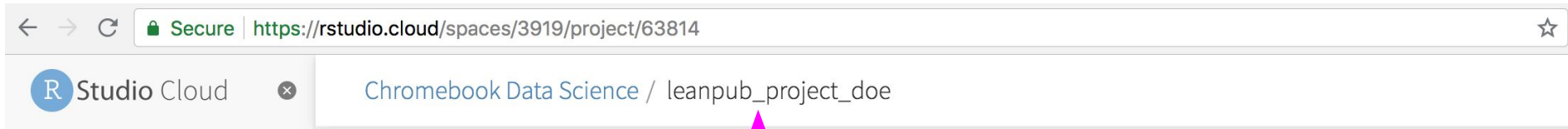
- ☒ By name
- ☐ By date created





Title your project here:  
leanpub\_project\_lastname





If your last name were Doe,  
it would look like this





File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function

Addins

R 3.5.0

leanpub\_googleworksheets\_analysis.R

Source on Save

Run

Source

```
1 ## get function needed to check data
2 source('/cloud/project/projectfiles/check_data.R')
3 ## install necessary packages
4 source('/cloud/project/projectfiles/packages.R')
5
6 ## load necessary R packages
7 library(googleworksheets)
8 library(dplyr)
9 library(ggplot2)
10
11 ## register your Google sheet
12 ## STOP! You have to paste your Google Sheet link below!
13 link = "PASTE_YOUR_GOOGLE_SHEET_LINK_HERE!"
14 check_link(link)
15
16 leanpub <- as_url(link)
17
18 (Top Level)
```

R Script

Console Terminal Jobs

/cloud/project/

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

New Folder Upload Delete Rename More

Cloud > project

	Name	Size	Modified
	..		
	Rhistory	0 B	Sep 5, 2018, 11:14 AM
	leanpub_googleworksheets_analysis.R	618 B	Sep 5, 2018, 11:09 AM
	project.Rproj	205 B	Sep 5, 2018, 11:14 AM
	projectfiles		

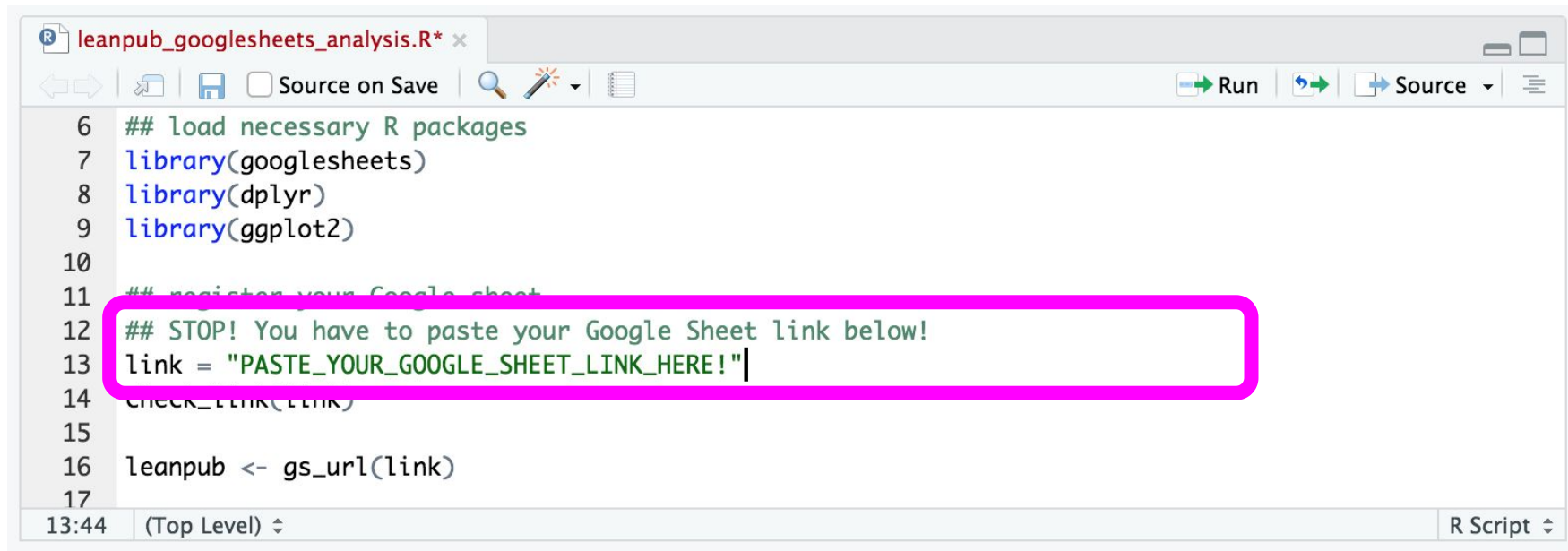
The screenshot displays the RStudio interface with the following components:

- Menu Bar:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Toolbar:** Includes icons for file operations and a "Go to file/function" search bar.
- Source Editor:** Contains the script `leanpub_googleworksheets_analysis.R`. The script is highlighted with a pink rounded rectangle. The code is as follows:

```
10
11 ## register your Google sheet
12 link = "PASTE_YOUR_GOOGLE_SHEET_LINK_HERE!"
13 check_link(link)
14
15 leanpub <- gs_url(link)
16
17 ## get data from your Google sheet
18 df <- leanpub %>%
19   gs_read()
20
21 ## run a few checks on the data
22 check_data(df)
23
24 ## plot relationships between cost and readers
25 qplot(readers,minimum,data=df)
26
27 (Top Level) >
```
- Environment Panel:** Shows "Global Environment" with the message "Environment is empty".
- Files Panel:** Displays the file structure under the path `/cloud / project`. It lists:
  - `..` (parent directory)
  - `leanpub_googleworksheets_analysis.R` (561 B, Apr 26, 2018, 11:14 AM)
  - `projectfiles` (folder)
- Console/Terminal:** Shows the current directory as `/cloud/project/` with a prompt `>`.







```
leanpub_googleworksheets_analysis.R* x
Source on Save
Run Source
6 ## load necessary R packages
7 library(googleworksheets)
8 library(dplyr)
9 library(ggplot2)
10
11 ## register your Google sheet
12 ## STOP! You have to paste your Google Sheet link below!
13 link = "PASTE_YOUR_GOOGLE_SHEET_LINK_HERE!"
14 check_link(link)
15
16 leanpub <- gs_url(link)
17
13:44 (Top Level) R Script
```



leanpub\_data



File Edit View Insert Format Data Tools Add-ons Help All changes saved in Drive

Share with others

Link copied to clipboard.

Get shareable link

Link sharing on [Learn more](#)

Anyone with the link **can view** ▼

Copy link

<https://docs.google.com/spreadsheets/d/19s1jHvx3kh9TYpSSTUGENrix7viubXtO6BdCanMHa9w/edit#gid=0>

People

Enter names or email addresses...



Done

<https://docs.google.com/spreadsheets/d/19s1jHvx3kh9TYpSSTUGENrix7viubXtO6BdCanMHa9w/edit?usp=sharing>

```
leanpub_googlesheets_analysis.R* x
Source on Save
Run Source
6 ## load necessary R packages
7 library(googlesheets)
8 library(dplyr)
9 library(ggplot2)
10
11 ## Register your Google sheet
12 ## STOP! You have to paste your Google Sheet link below!
13 link = "https://docs.google.com/spreadsheets/d/19s1jHvx3kh9TYpSSTUGENrix7viubXt06BdCanMHa9w/"
14 check_link(link)
15
16 leanpub <- gs_url(link)
17
13:92 (Top Level) R Script
```

leanpub\_googleworksheets\_analysis.R x

Source on Save

Run

Source

```
1 ## get function needed to check data
2 source('/cloud/project/projectfiles/check_data.R')
3 ## install necessary packages
4 source('/cloud/project/projectfiles/packages.R')
5
6 ## load necessary R packages
7 library(googleworksheets)
8 library(dplyr)
9 library(ggplot2)
10
11 ## register your Google sheet
12 ## STOP! You have to paste your Google Sheet link below!
```

26:31 (Top Level) ↕ R Script ↕

Console Terminal x

/cloud/project/ ↗

> |

Environment History Connections

Import Dataset

List ↕ ↺

Global Environment ▾

Environment is empty

Files Plots Packages Help Viewer

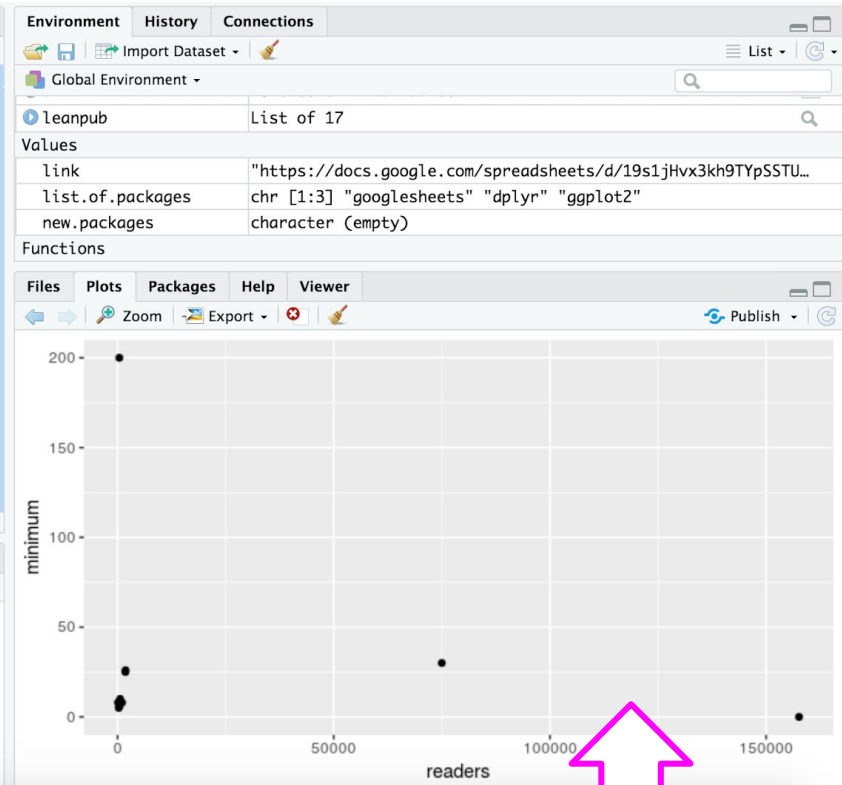
New Folder Upload Delete Rename More

/ > cloud > project

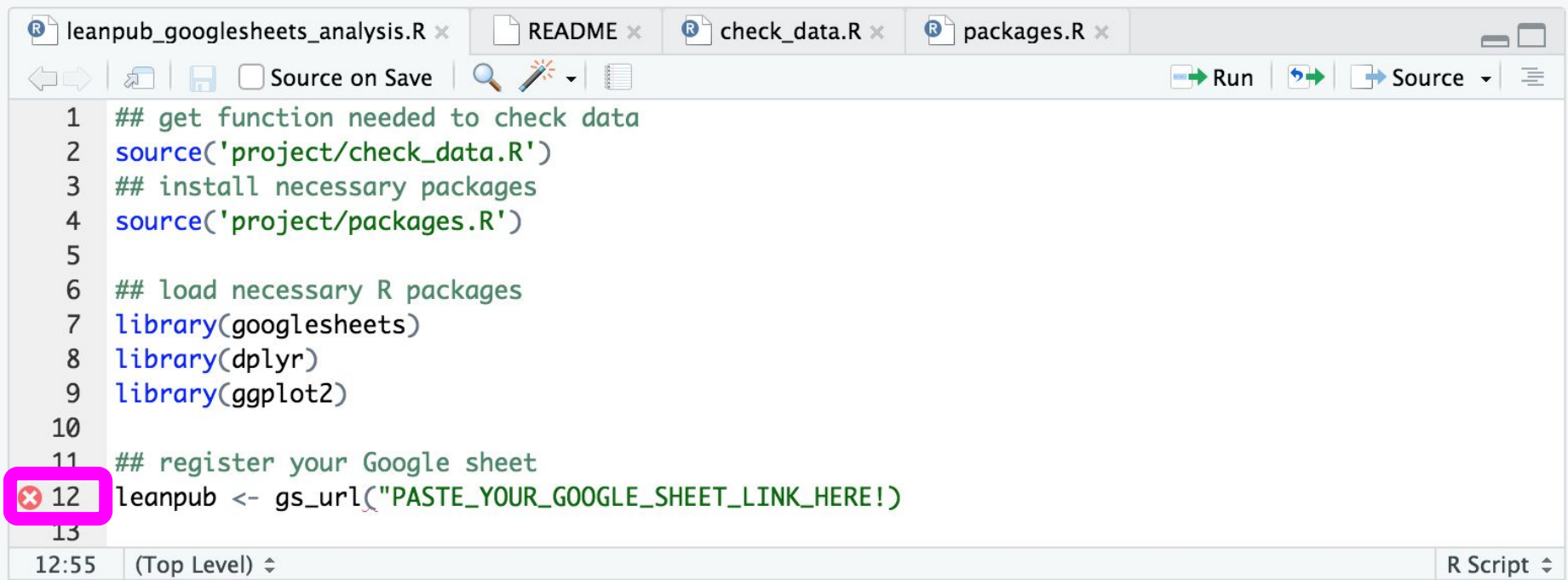
	Name	Size	Modified
↗	..		
<input type="checkbox"/>	leanpub_googleworksheets_analysis.R	618 B	Apr 26, 2018, 11:24 AM
<input type="checkbox"/>	projectfiles		



```
leanpub_googleheets_analysis.R* x
1 ## get function needed to check data
2 source('/cloud/project/projectfiles/check_data.R')
3 ## install necessary packages
4 source('/cloud/project/projectfiles/packages.R')
5
6 ## load necessary R packages
7 library(googleheets)
8 library(dplyr)
9 library(ggplot2)
10
11 ## register your Google sheet
12 ## STOP! You have to paste your Google Sheet link below!
13 link = "https://docs.google.com/spreadsheets/d/19s1jHvx3kh9TYpSSTUGENrix7viubXt06BdCanMHa9w"
14 check_link(link)
15
16 leanpub <- gs_url(link)
17
18 ## get data from your Google sheet
19 df <- leanpub %>%
20   gs_read()
21
22 26:31 (Top Level) R Script
23
24 Console Terminal x
25 /cloud/project/
26 >
27 > ## run a few checks on the data
28 > check_data(df)
29 [1] "Your spreadsheet has passed all checks. You're ready to plot!"
30 >
31 > ## plot relationships between cost and readers
32 > qplot(readers,minimum,data=df)
33 > |
```



Plot should show up over here once you run the code



The image shows a screenshot of the RStudio IDE. The top toolbar includes icons for navigation, saving, and running code. The editor window displays an R script with the following content:

```
1 ## get function needed to check data
2 source('project/check_data.R')
3 ## install necessary packages
4 source('project/packages.R')
5
6 ## load necessary R packages
7 library(googleheets)
8 library(dplyr)
9 library(ggplot2)
10
11 ## register your Google sheet
12 leanpub <- gs_url("PASTE_YOUR_GOOGLE_SHEET_LINK_HERE!")
13
```

Line 12 is highlighted with a pink box, and a red 'x' icon is visible next to the line number, indicating a syntax error. The status bar at the bottom shows the time as 12:55 and the current context as (Top Level).

```
10
11 ## register your Google sheet
12 link = "PASTE_YOUR_GOOGLE_SHEET_LINK_HERE!"
13 check_link(link)
14
15 leanpub <- gs_url(link)
16
17 ## get data from your Google sheet
18 df <- leanpub %>%
19   gs_read()
20
21 ## run a few checks on the data
22 check_data(df)
23
24 ## plot relationships between cost and readers
25 qplot(readers, minimum, data=df)
```

4:49 (Top Level) R Script

Environment History Connections

Global Environment

Environment is empty

Files Plots Packages Help Viewer

New Folder Upload Delete Rename More

cloud > project

	Name	Size	Modified
	..		
	leanpub_google sheets_analysis.R	561 B	Apr 26, 2018, 11:14 AM
	projectfiles		

Console Terminal

/cloud/project/

>

If plot doesn't show up to  
the right, errors will be  
down here.

