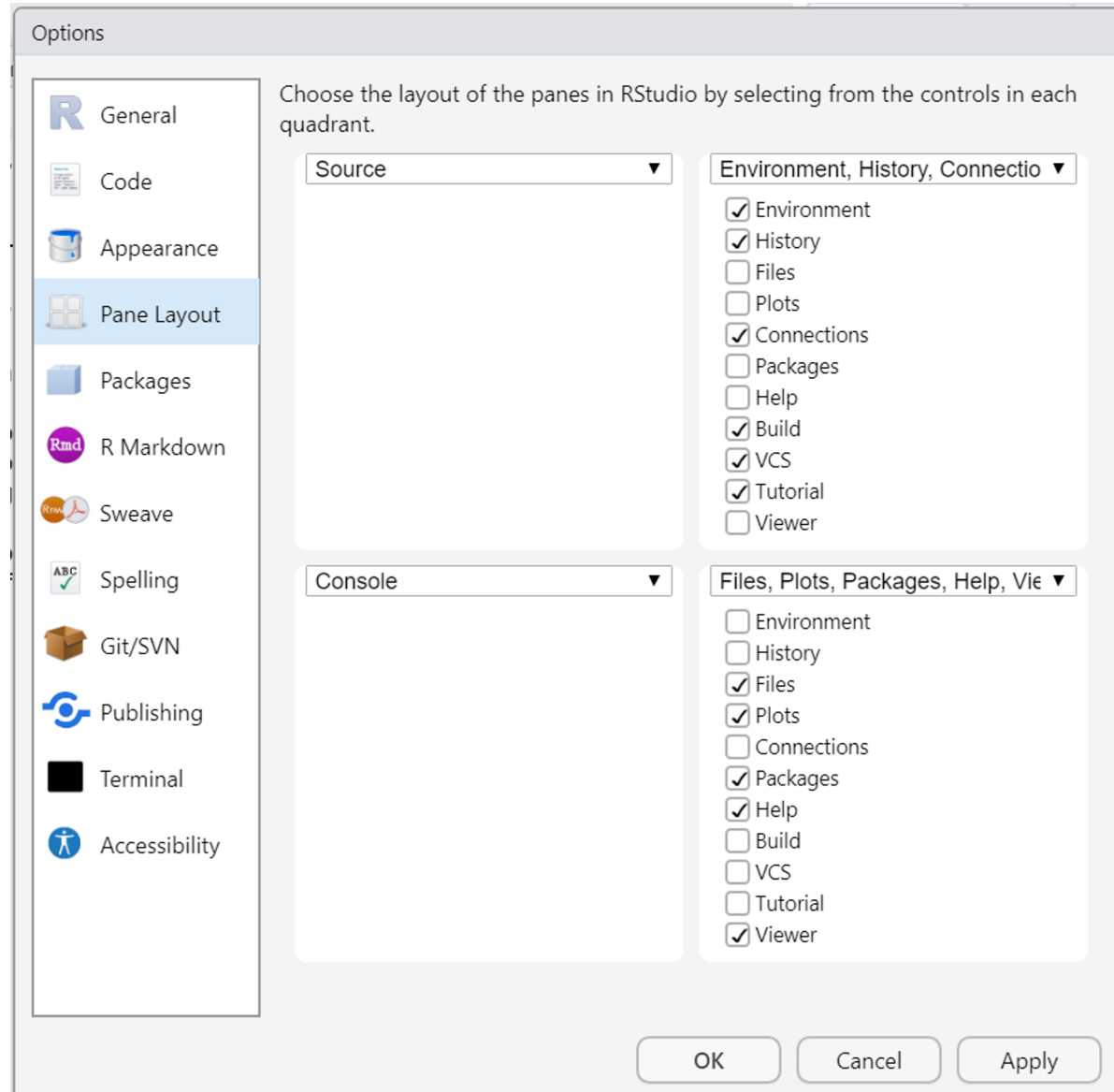


Introduction to R

JO 521



```
R version 4.0.3 (2020-10-10) -- "Bunny-wunnies Freak Out"  
Copyright (C) 2020 The R Foundation for Statistical Computing  
Platform: x86_64-w64-mingw32/x64 (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.
```

```
Natural language support but running in an English locale
```

```
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 is empty

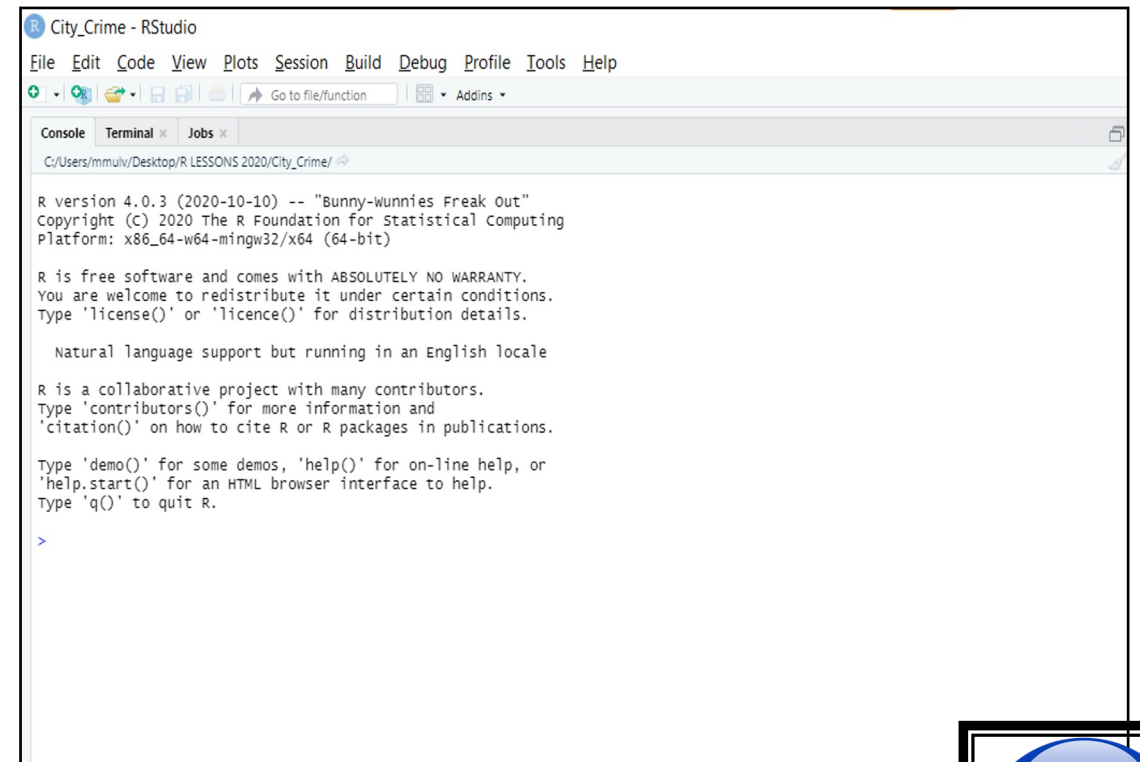
	Name	Size	Modified
	..		
<input type="checkbox"/>	.Rhistory	120 B	Oct 30, 2020, 7:02 PM
<input type="checkbox"/>	City_Crime.Rproj	218 B	Oct 30, 2020, 7:02 PM

Getting to Know the R Environment

When we first launch R Studio, we see this:

The Left Side Is The CONSOLE

- There are three tabs – CONSOLE, TERMINAL and JOBS
- Let's focus on CONSOLE
- You run code in the console
- You can see results in real time
- Clicking up the Up Arrow will show you the most recent command you typed



The screenshot shows the RStudio interface with the 'Console' tab selected. The console displays the R startup message for version 4.0.3 (2020-10-10). The message includes the R logo, version information, copyright notice, and a list of commands for help and quitting. The console path is C:/Users/mmulw/Desktop/R LESSONS 2020/City_Crime/.

```
R version 4.0.3 (2020-10-10) -- "Bunny-wunnies Freak Out"
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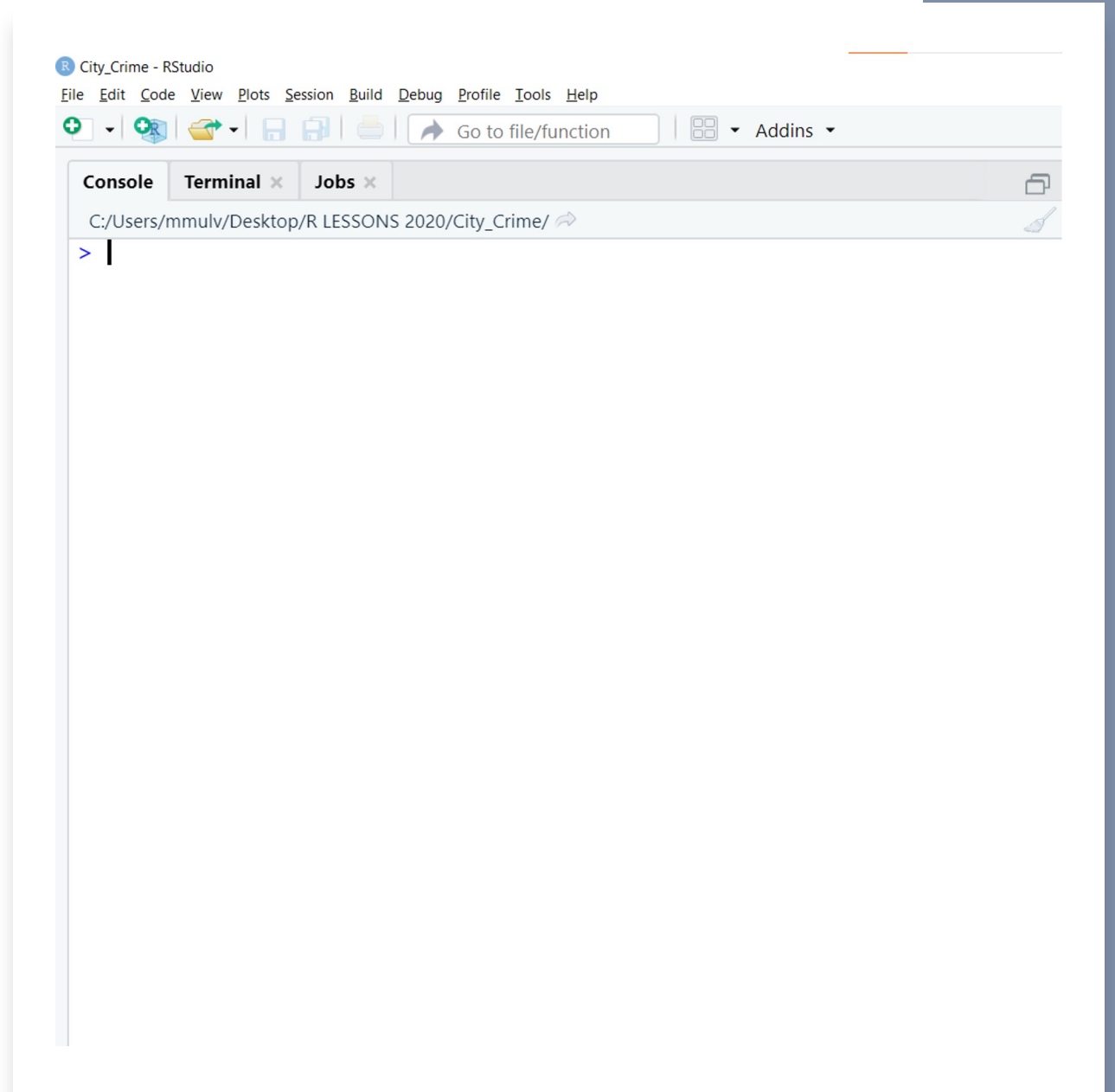
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

>
```

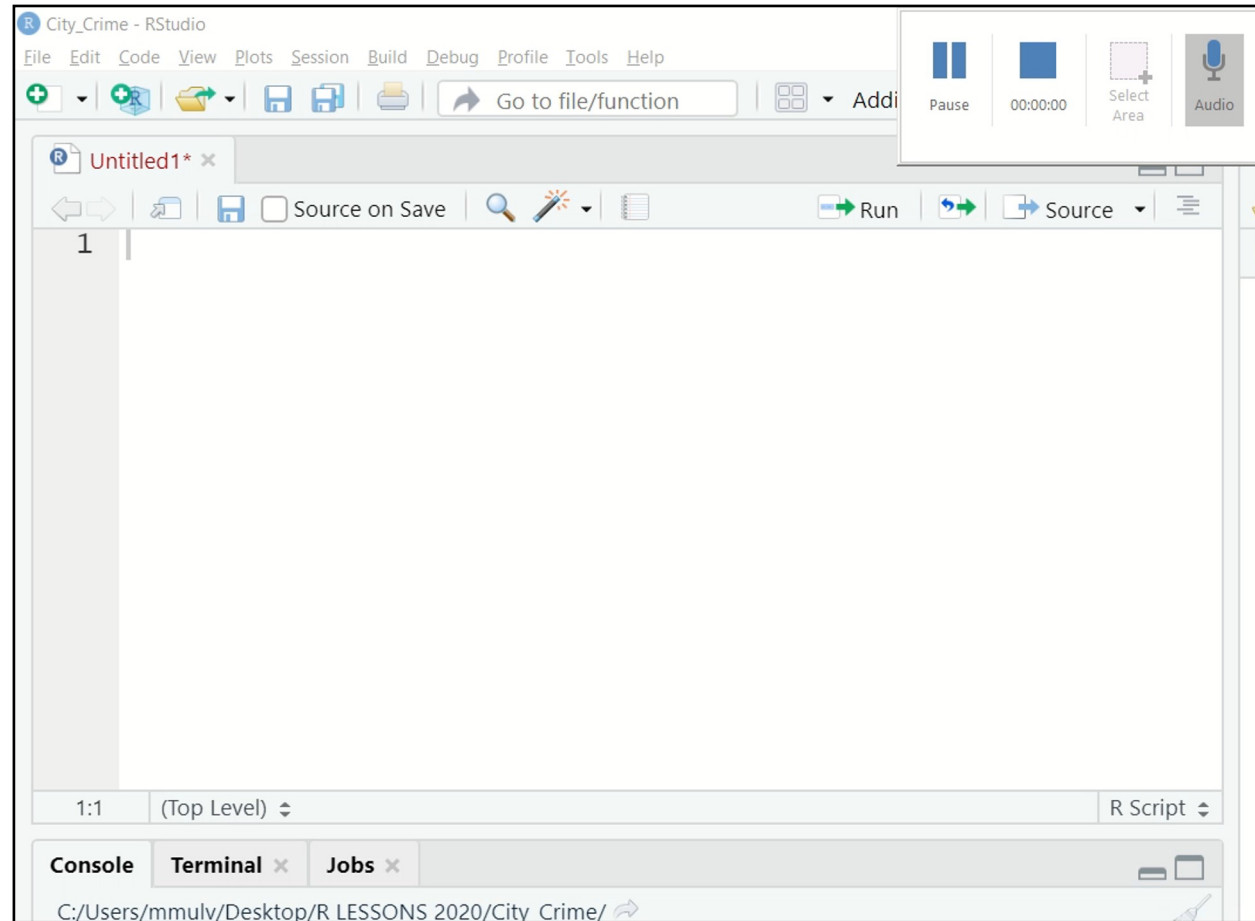




To Clear the
Console Click
CTRL or CMND L



Scripts v. Markdown



City_Crime - RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Untitled1 x

```
1 ---
2 title: "City_Crime"
3 output: html_document
4 ---
5
6 ```{r setup, include=FALSE}
7 knitr::opts_chunk$set(echo = TRUE)
8 ```
9
10 ## R Markdown
11
12 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents.
13 For more details on using R Markdown see <http://rmarkdown.rstudio.com>.
14
15 When you click the Knit button a document will be generated that includes both content as well as the output of
16 any embedded R code chunks within the document. You can embed an R code chunk like this:
17
18 ```{r cars}
19 summary(cars)
20 ```
21
22 ## Including Plots
23
24 You can also embed plots, for example:
25
26 ```{r pressure, echo=FALSE}
27 plot(pressure)
28 ```
29
30 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated
31 the plot.
```

City_Crime R Markdown

Console Terminal Jobs

C:/Users/mmulv/Desktop/R LESSONS 2020/City_Crime/

R version 4.0.3 (2020-10-10) -- "Bunny-wunnies Freak Out"
Copyright (C) 2020 The R Foundation for Statistical Computing
Platform: x86_64-w64-mingw32/x64 (64-bit)

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Type 'q()' to quit R.

> |

Pause 00:00:00 Select Area Audio Record Pointer

City_Crime

Connections Tutorial

Global Environment

Environment is empty

Files Plots Packages Help Viewer

New Folder Delete Rename More

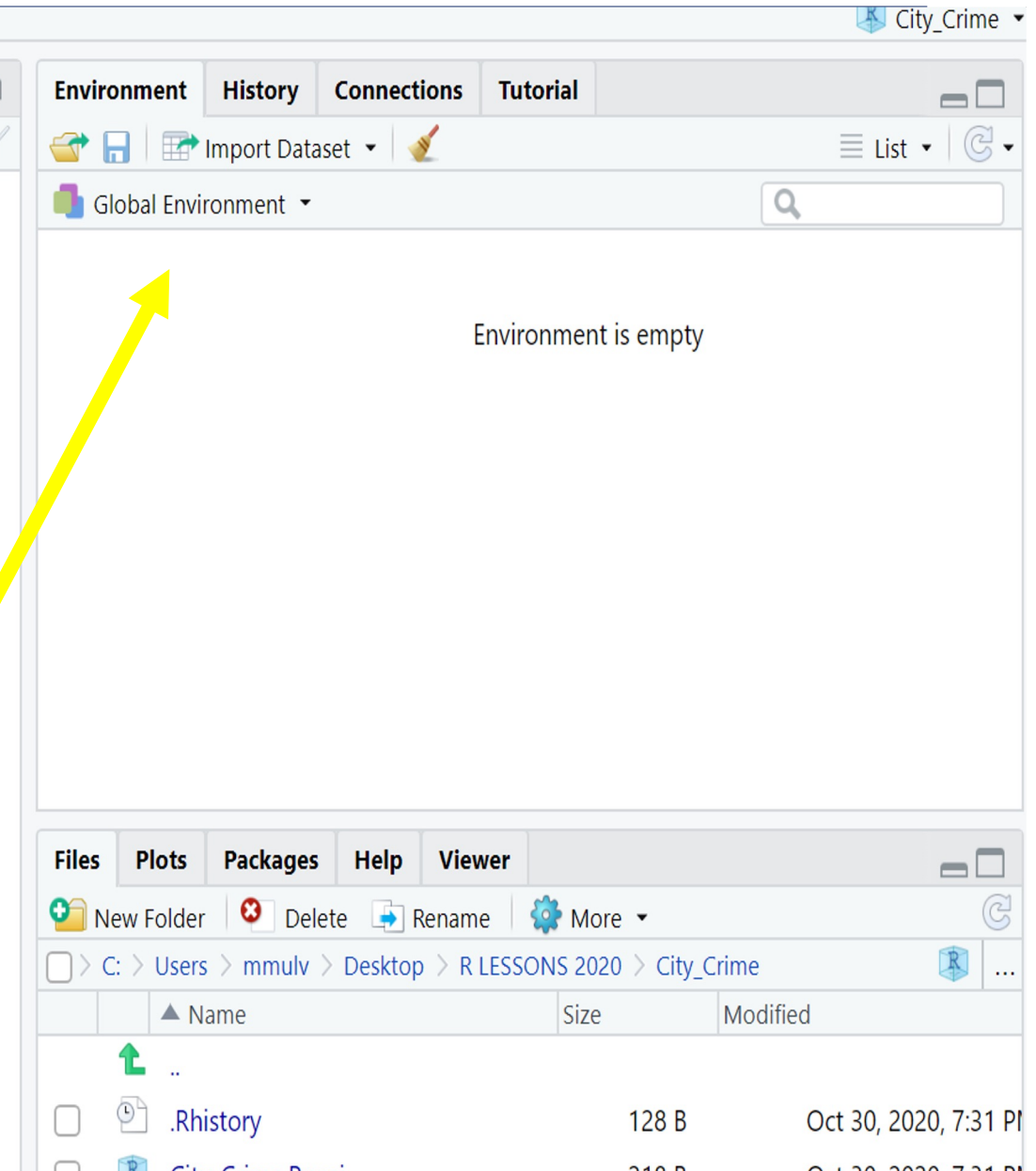
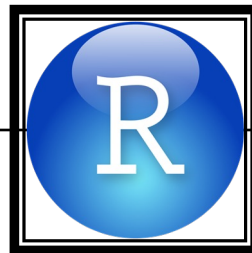
C:/Users/mmulv/Desktop/R LESSONS 2020/City_Crime

Name	Size	Modified
..		
.Rhistory	120 B	Oct 30, 2020, 7:02 PM
City_Crime.Rproj	218 B	Oct 30, 2020, 7:02 PM

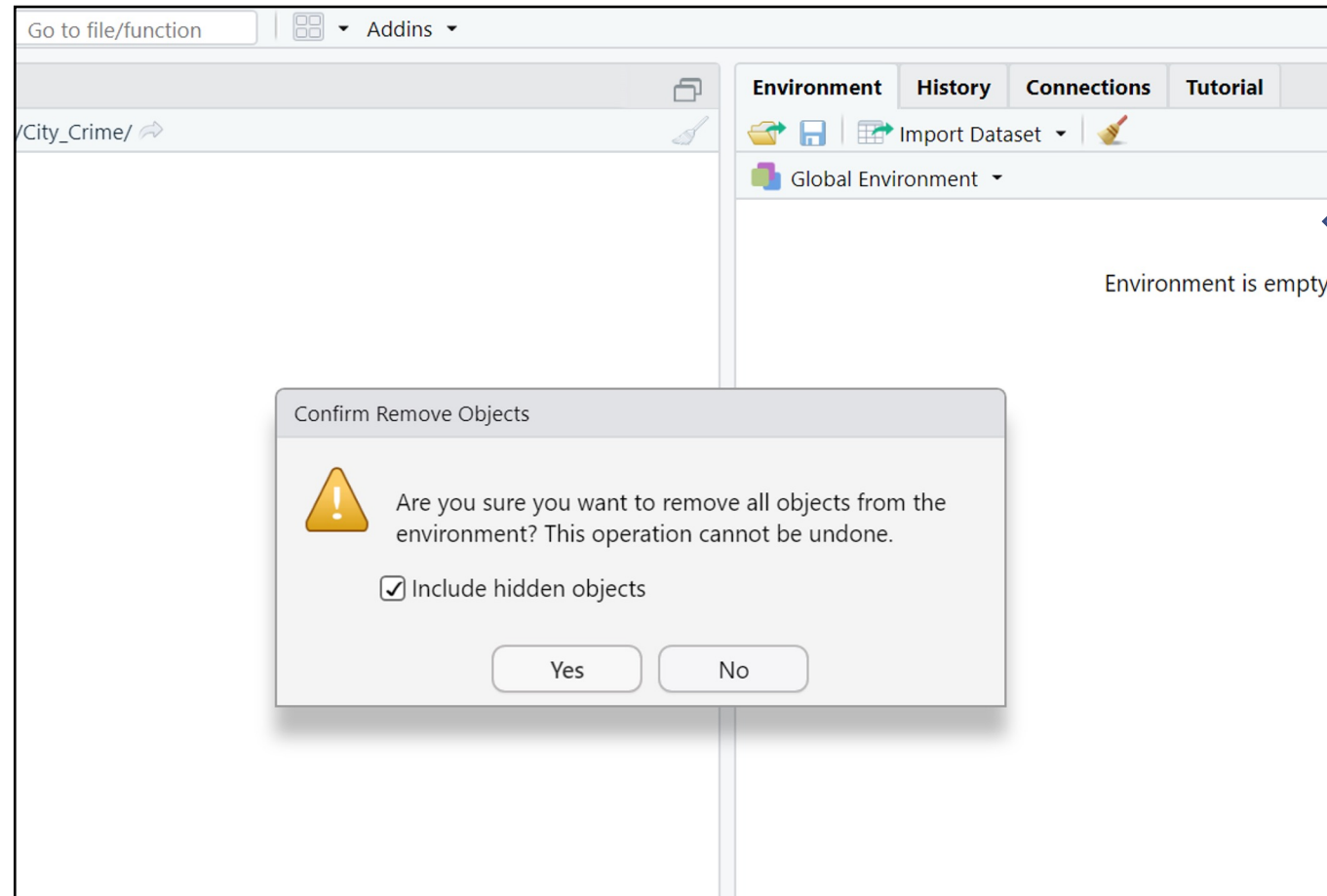
- You can move the visibility of any of the panes so you can see more of your work
- you can increase the visibility when you need to

The Global Environment

- On the upper right is the “Global Environment”
- Any variables we import or data frames we create will be stored here
- We can go under the Environment tab to see what we have

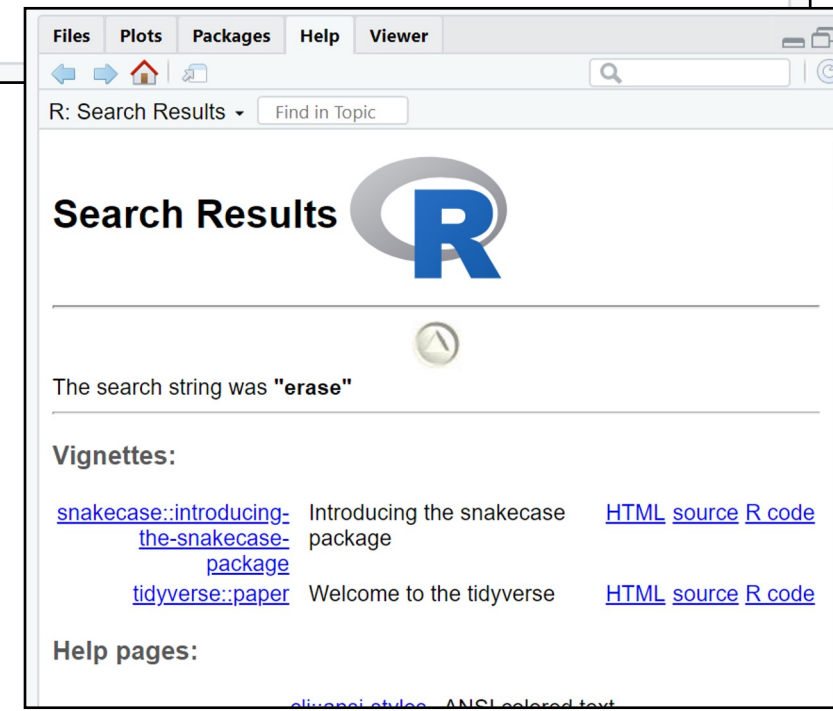
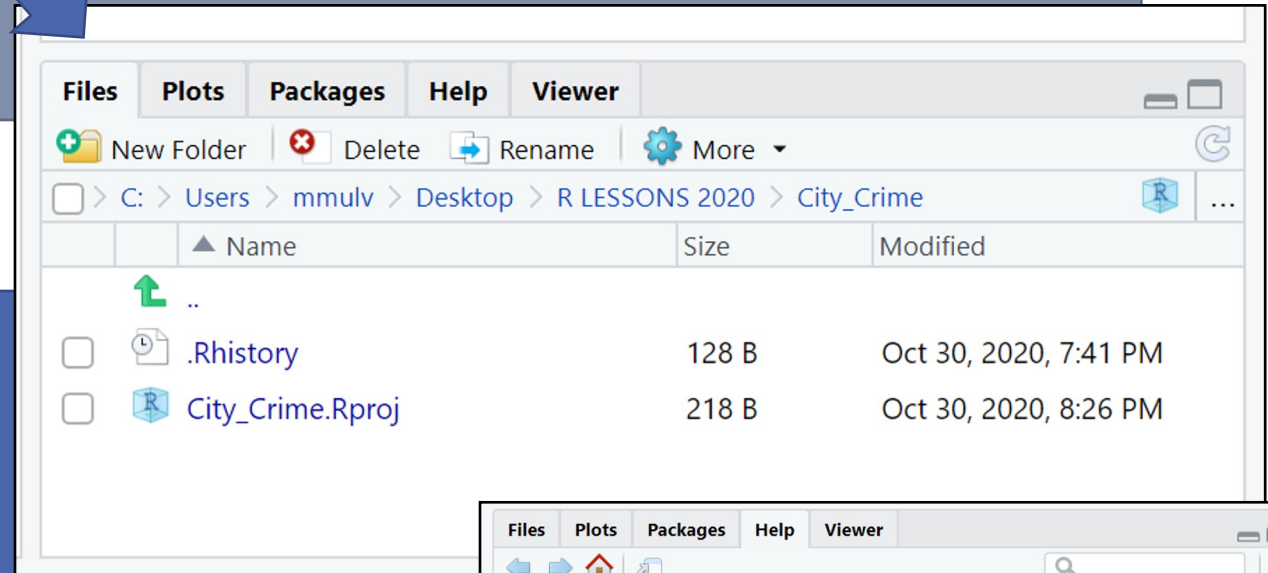


We Can Also Sweep Away Anything We Don't Need



The Files Window

- Our FILES window is on the bottom right
- This is where we see:
 - all our files
 - packages we've imported
 - And get help



Getting to Know the R Environment

- # look around RStudio -----

-
- #There are 4 panes. We are currently in the script editor area
- #In the upper right, note the Environment tab. When we import data or create an new data frames they will appear there
- #In the lower right, the Files tab shows us what is stored in our working directory
- #The packages tab shows us which packages are loaded on our machine; if checked, it's turned on for this project
- #Any ggplots we make will display under the Plots tab

- #The help tab is useful for finding out information about a particular package or function
- #The Console (below) will display a trail of each of our steps and show output from what we do in the script but it will not be saved
- #Terminal is something you would use if you connect your project to Github
-
- #Types of R files - scripts, notebooks, RMarkdown, etc
-
- #About R Notebooks:
<https://rviews.rstudio.com/2017/03/15/why-i-love-r-notebooks/>