

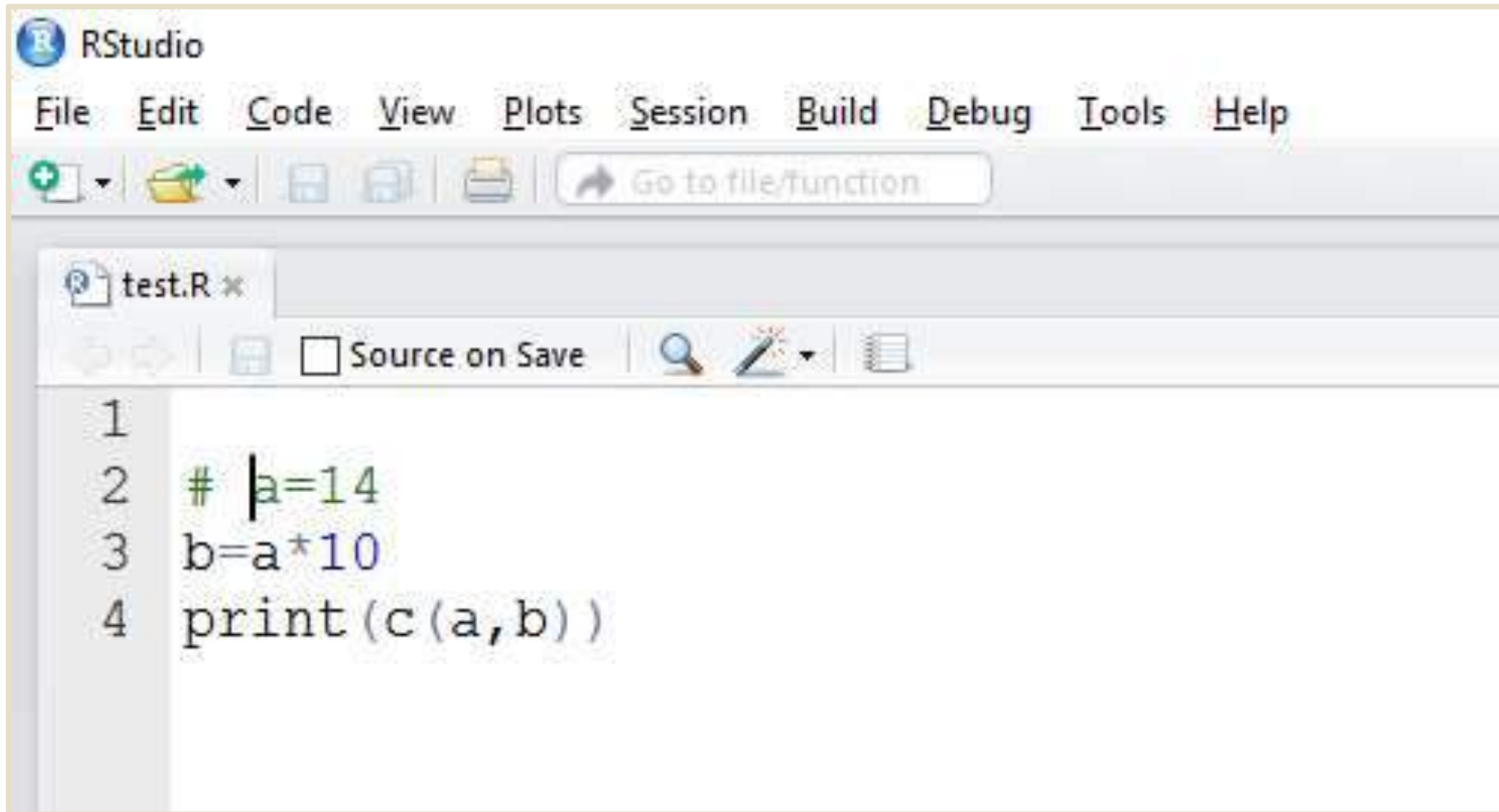
Introduction to R

In this lecture

- How to
 - add comments
 - clear the environment
 - saving the workspace

Add comments –single line

For single line comment, insert '#' at the start of the line

A screenshot of the RStudio interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Tools, and Help. Below the menu is a toolbar with icons for file operations and a search bar labeled 'Go to file/function'. The main editor window shows a script named 'test.R' with four lines of code. Line 2 is a single-line comment starting with '#'.

```
1  
2 # a=14  
3 b=a*10  
4 print(c(a,b))
```

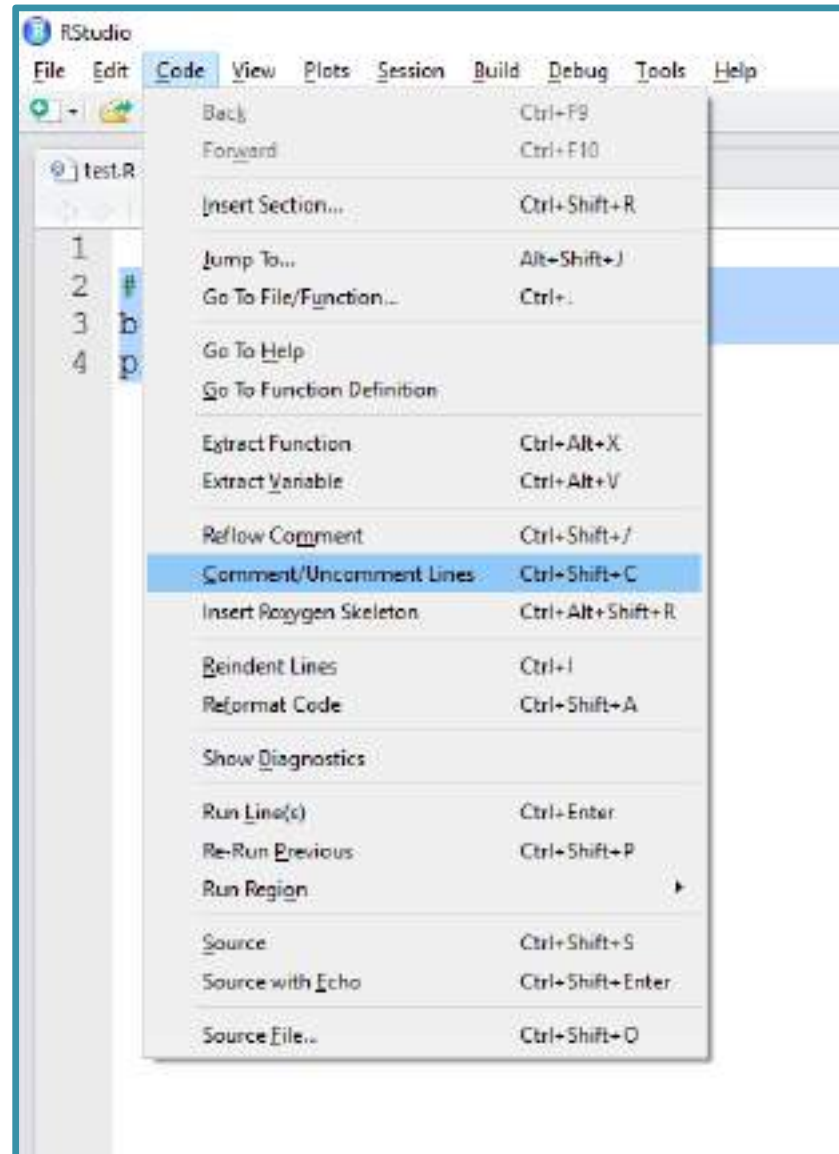
Add comments –Multiple lines

Two ways:

1) Select multiple lines using cursor, then press “Ctrl + Shift + C”

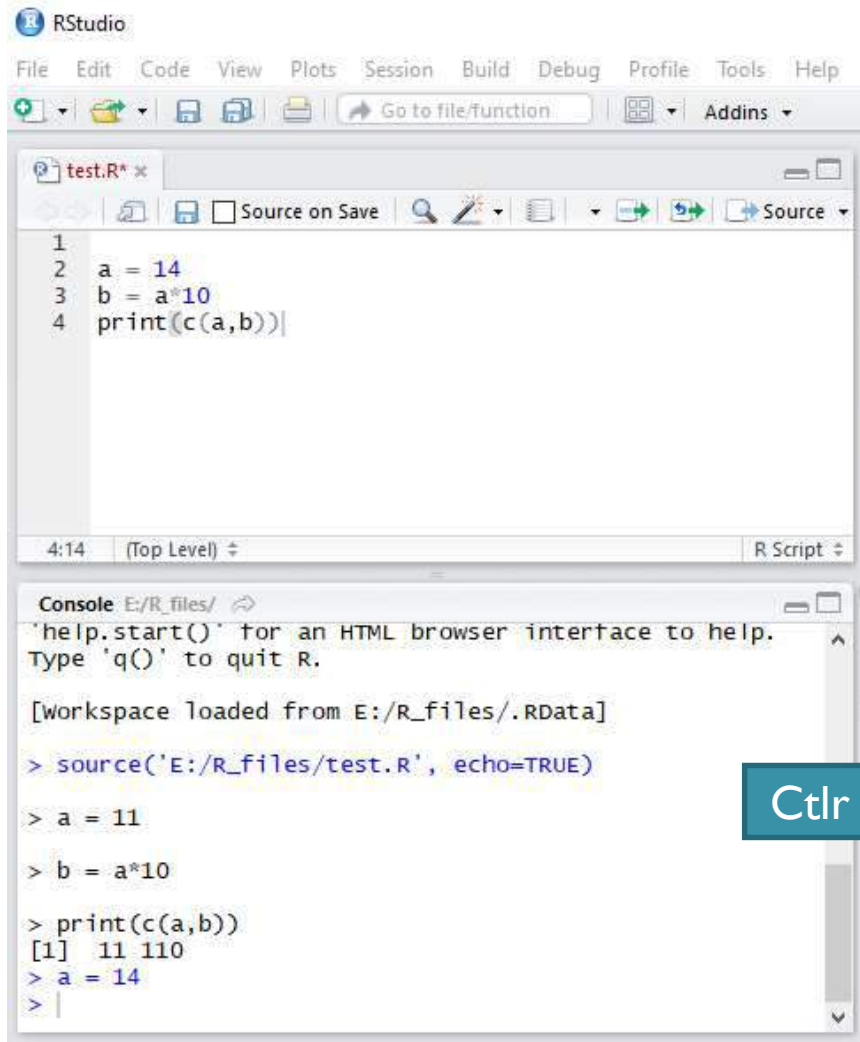
(OR)

2) Select multiple lines using cursor, click on “Code” in menu and select “Comment/Uncomment Lines”



Clear the console

“control +L”



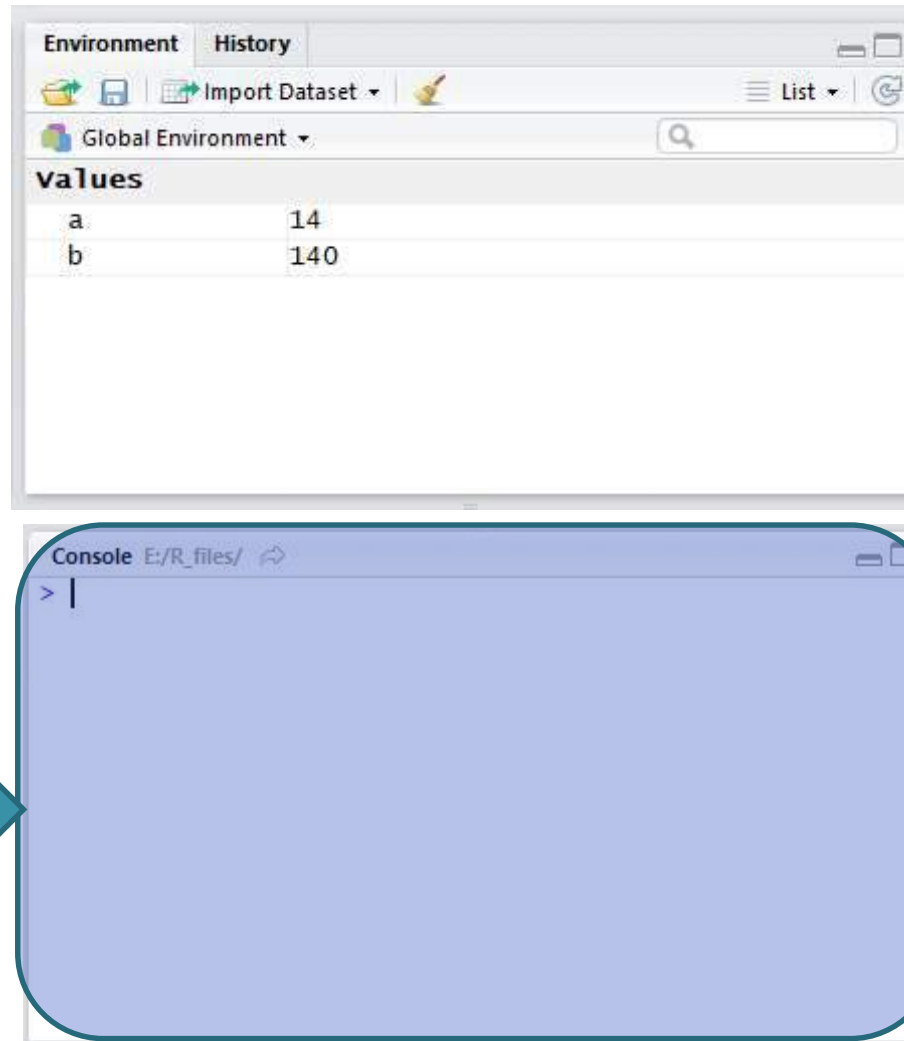
The RStudio interface is shown with a script editor and a console. The script editor contains the following code:

```
1  
2 a = 14  
3 b = a*10  
4 print(c(a,b))
```

The console shows the output of the script execution:

```
'help.start()' for an HTML browser interface to help.  
Type 'q()' to quit R.  
  
[workspace loaded from E:/R_files/.RData]  
> source('E:/R_files/test.R', echo=TRUE)  
> a = 11  
> b = a*10  
> print(c(a,b))  
[1] 11 110  
> a = 14  
>
```

Ctrl + L



The RStudio Environment and Console windows are shown. The Environment window displays the values of variables 'a' and 'b' in the Global Environment:

values	
a	14
b	140

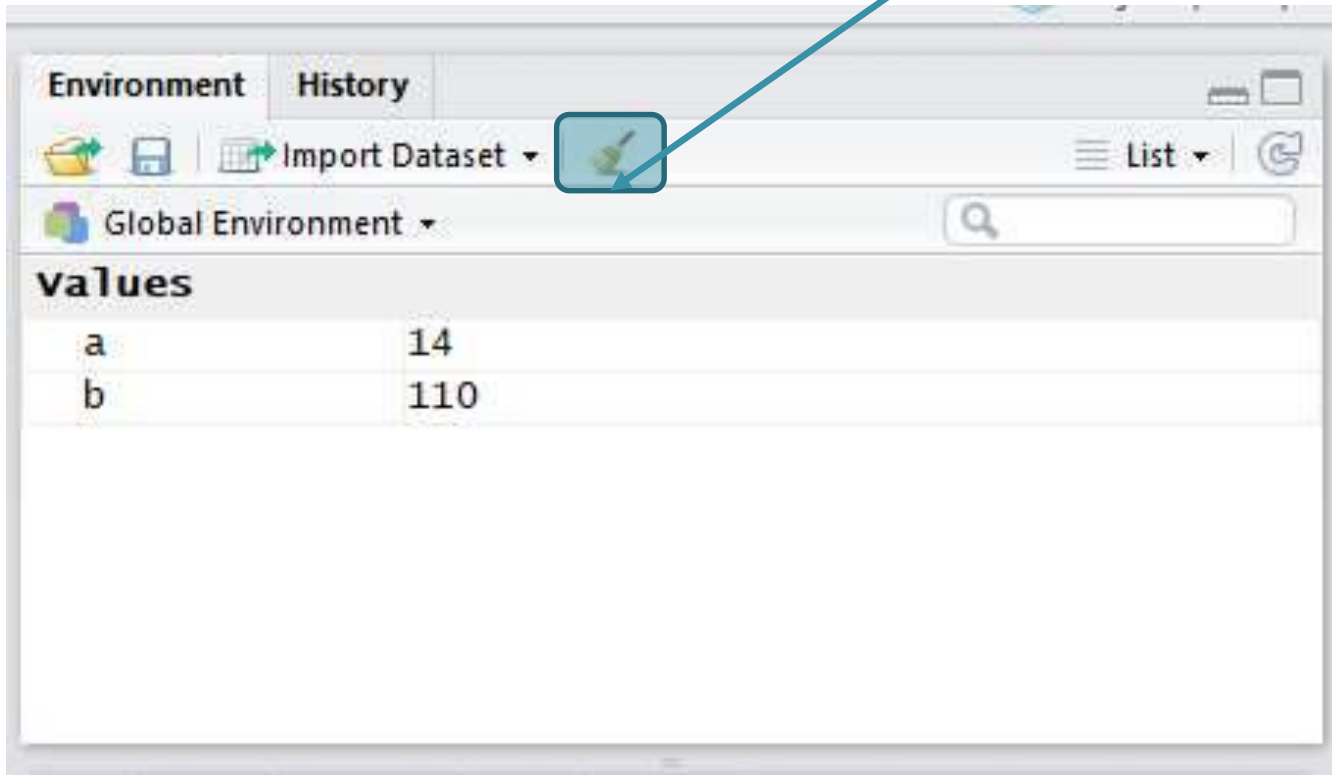
The Console window shows the prompt '> |' and is highlighted with a blue border, indicating it is the target of the Ctrl + L action.

Clear the environment –rm()

Single variable: Enter in console/R script : `rm(variable)`

All variables: Enter in console/R script : `rm(list=ls())`

OR



Confirmation dialog



Empty environment

The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains a script named `test.R` with the following code:


```
1
2 a = 14
3 b = a*10
4 print(c(a,b))
```
- Environment Panel:** Displays "Global Environment" and a message "Environment is empty".
- Console:** Shows the execution of the script:


```
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[workspace loaded from E:/R_files/.RData]

> source('E:/R_files/test.R', echo=TRUE)

> a = 11
> b = a*10

> print(c(a,b))
[1] 11 110
> a = 14
>
```
- Files Panel:** Shows the directory `E:/R_files` with a list of files:

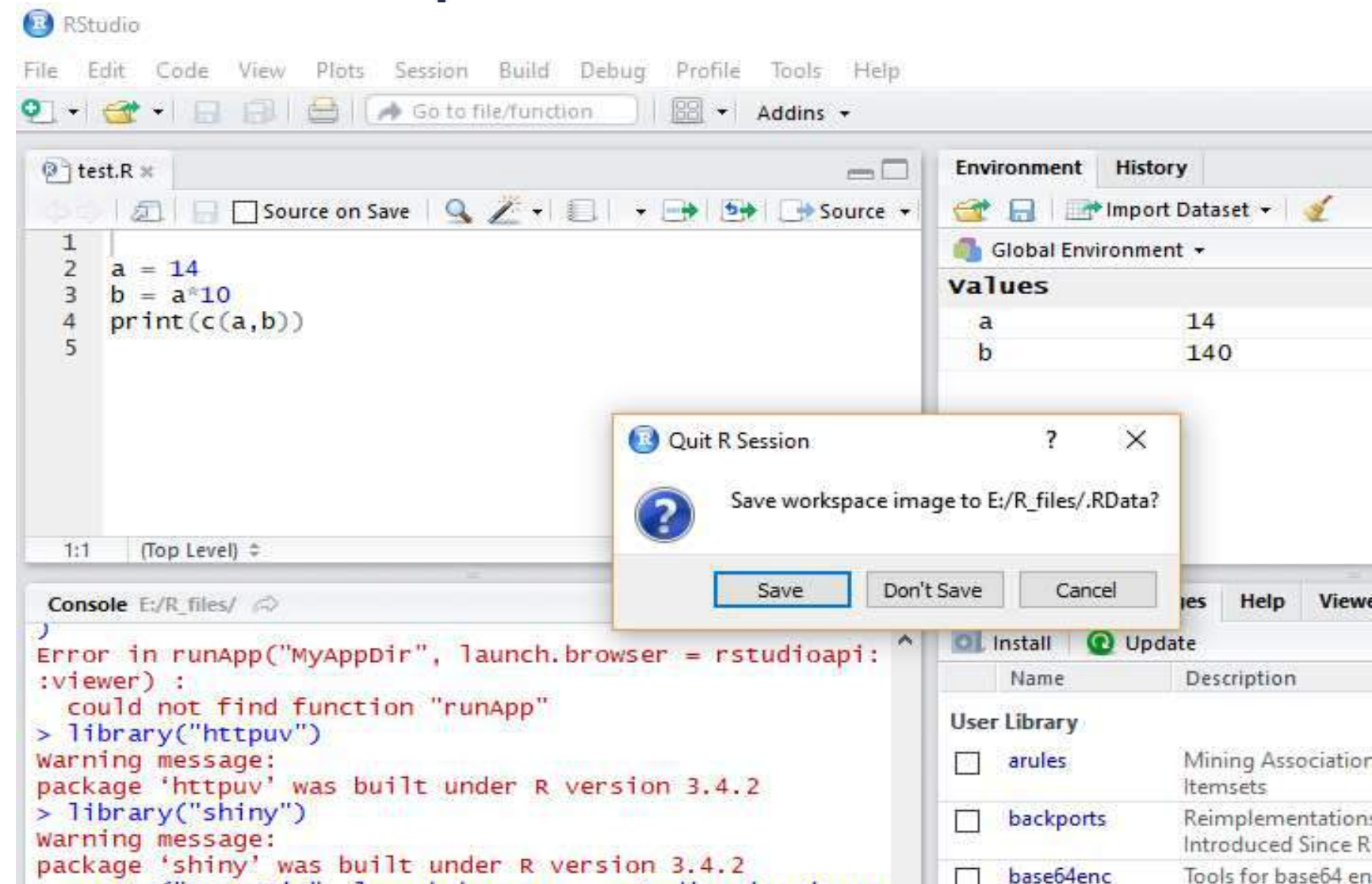
Name	Size	Modified
..		
.RData	40 B	Oct 14, 2017, 6:39 P
.Rhistory	2 KB	Nov 27, 2017, 4:07
acDetails.txt	432.3 KB	Sep 9, 2017, 3:16 P
CHURN-DataPrep.R	8.3 KB	Sep 5, 2017, 7:52 P
churnFinal.csv	954.6 KB	Sep 9, 2017, 3:16 P
class3.R	4.3 KB	Sep 16, 2017, 2:19 P

Saving data from workspace

Workspace data

- Workspace information is temporary
- Is not retained after the session
 - If you close the R-session
 - If you restart the computer

Automatic option



Manual saving

- Can be permanently saved in a file – save command
- Can be reloaded for future sessions – load command

Example code

```
save(a, file="sess1.Rdata") # to save a single variable 'a'
```

```
# to save a full workspace with specified file name
```

```
save(list=ls(all.names=TRUE), file="sess1.Rdata")
```

```
save.image() # short cut function to save whole workspace
```

```
load(file="sess1.Rdata") # to load saved workspace
```