Submitting Homework that includes R code

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You can create the source file in a number of different ways:

a. In R go to the **File** menu and select **New script** (or **Open script** when editing an existing command file).

b. Using your favorite word processing program (hint, turn off auto-correct).

c. Using the history command to recall your previous R commands and copy and paste them into a word processing program.

To show your recent commands, you can always call the `history()` function, which displays the command history. The default is

```
> history(max.show = 25, reverse = FALSE)
```

or you can use the `savehistory` function

```
> savehistory(file = ".Rhistory")
```

Example

Suppose your R commands are stored on an external file named "commands.txt" in the current working directory, they may be executed at any time in an R session with the command

```
> source("commands.txt", echo = TRUE)
```

The function `sink('output.txt')` will divert all subsequent output from the console to an external file named 'output.txt'. The command `sink()` restores it the console once again.

For example, suppose your homework assignment required that you input data and then calculate the mean, median, and sum. First, create a source file, e.g., contents of 'commands.txt' as follows:

```
################
### Problem 1 ####
x <- c(29, 57, 58, 73, 77, 87, 66, 20, 80, 4)
mean(x)
median(x)
sum(x)
```

Next, create a sink file using

```
> sink("output.txt")
```

then run your source code using

```
> source("commands.txt", echo = TRUE)
```

turn off routing output to your sink file by

```
> sink()
```

Then open your sink file in your favorite word processor to verify your results. Be sure to comment your code so that each problem is clearly identifiable. Also, if the problem asks a specific question, such as "What is the estimate of the slope parameter?" Be sure to look at your sink file then add a comment to your source file after your code for the given problem such as

```
### Slope = 3.82 ####
```

Finally, submit your source and sink files via the Submit Homework tab in Blackboard to be graded.

Warning I: When using `scan()` the entered values will not appear in the history.

Warning II: DO NOT INCLUDE A LINE THAT READS
`source("commands.txt")`
IN YOUR SOURCE FILE!

Please submit one source and one sink file per homework assignment using the following naming convention:
   *lastname*hmwk*n*commands.txt
   *lastname*hmwk*n*out.txt

Again, be sure to comment your code so that each problem is clearly identifiable. ### Problem 1a ###