

SIMPLILEARN: Lab Demo | Data Science with R

1. Path to locate the Lab:

LMS account > Course Icon > Projects > Lab Access > R - Lab

The screenshot shows the 'Data Science with R' course page. On the left is a dark sidebar with icons for BACK, CLASSES, PROJECTS (highlighted), and CERTIFICATE. The main area has a top bar with 'Data Science with R' and 'HELP & SUPPORT' / 'LEARNING TOOLS'. Below this, the 'Projects' tab is active, and 'Lab Access' is highlighted. Under 'Services', there is an 'R-lab' icon. To the right, there is a graphic of a laptop with data visualizations and a text box that reads: 'PLEASE READ THIS INFORMATION CAREFULLY BEFORE YOU START LEARNING. This is virtual lab environment for you to work on your live project. An online cloud-based environment for data science participants for practicing data science demos and projects using R. It eliminates all hassles of download and installation and provides'.

2. How to upload the dataset:

Click on Your datasets > Upload New Dataset > Select a file from your local Machine

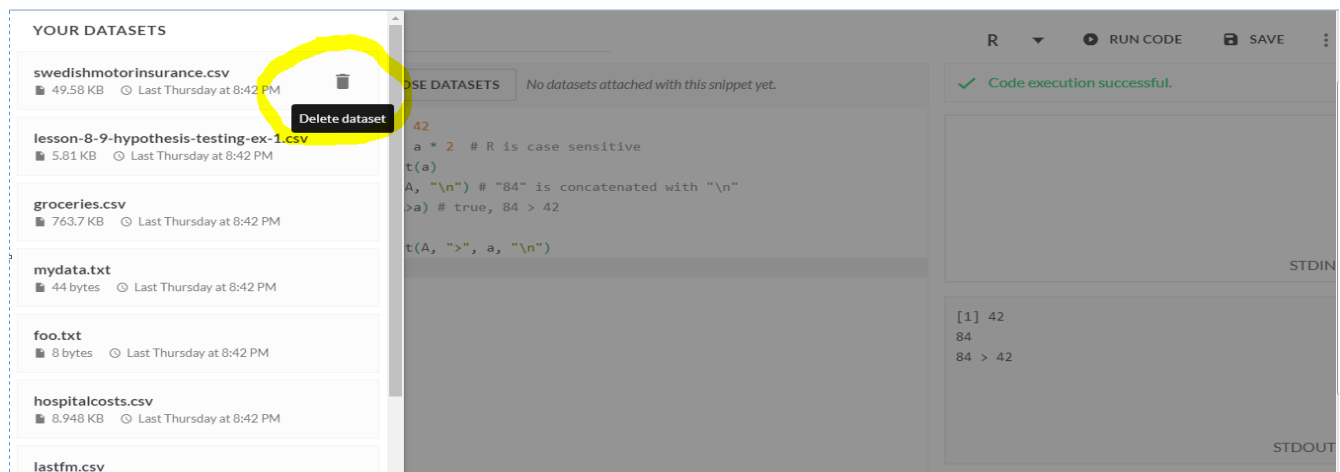
The screenshot shows the 'YOUR DATASETS' panel on the left, listing several CSV and TXT files. The 'UPLOAD NEW DATASET' button at the bottom is circled in yellow. To the right is the RStudio interface, showing a script editor with R code for setting up a project and loading packages. The code includes comments about the RStudio citation and the tidyverse package. The 'RUN CODE' button is visible in the top right of the RStudio window.

****Note – Maximum dataset size supported is 20 MB. If your dataset size exceeds the limit kindly follow the steps mentioned below:

- i. Upload the dataset on <http://pinetools.com/split-files>
- ii. Split the dataset into 2 parts and download locally.
- iii. Upload the 2 parts in the lab using the `Upload Datasets` option
- iv. To concat and use the data from 2 input files use the code mentioned below:

```
data1 = read.csv("/data/ratings.dat.000", sep = ":", colClasses = c(NA, "NULL"), header = FALSE)
data2 = read.csv("/data/ratings.dat.001", sep = ":", colClasses = c(NA, "NULL"), header = FALSE)
data = rbind(data1, data2)
```

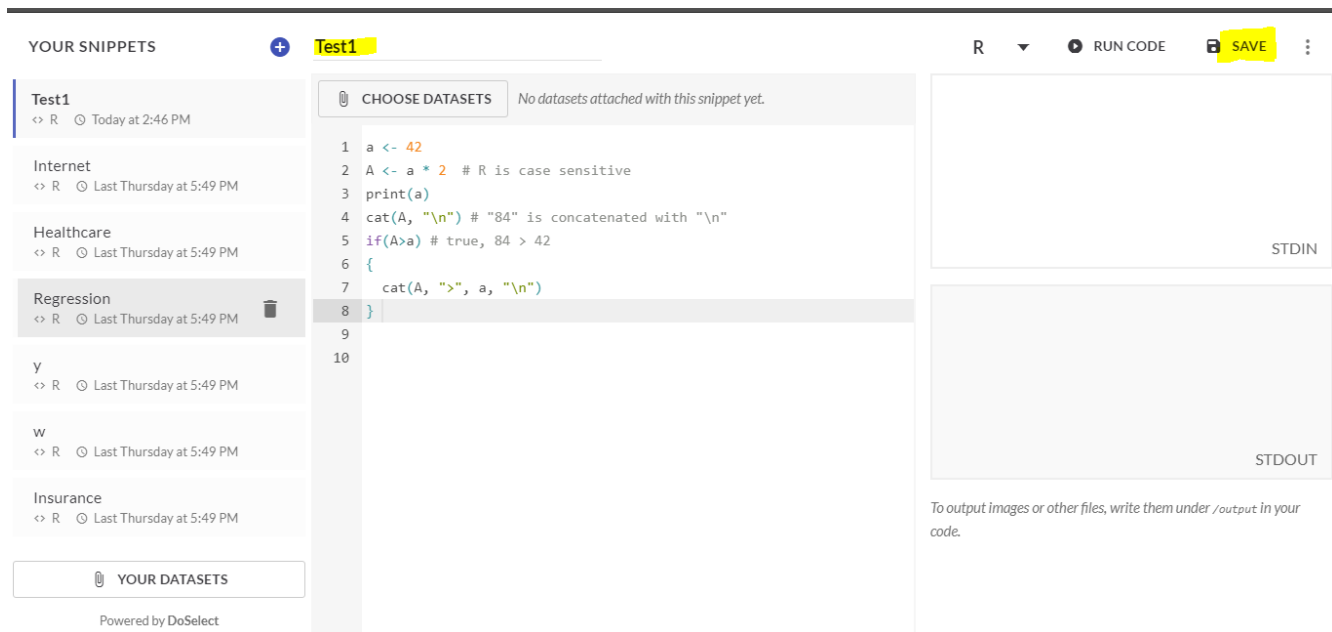
3. How to delete a dataset from the available datasets in the lab for R:



4. How to create a new R-Script:



5. Save your R- Script:



YOUR SNIPPETS

Test1
↔ R ⌚ Today at 2:46 PM

Internet
↔ R ⌚ Last Thursday at 5:49 PM

Healthcare
↔ R ⌚ Last Thursday at 5:49 PM

Regression
↔ R ⌚ Last Thursday at 5:49 PM

Y
↔ R ⌚ Last Thursday at 5:49 PM

W
↔ R ⌚ Last Thursday at 5:49 PM

Insurance
↔ R ⌚ Last Thursday at 5:49 PM

YOUR DATASETS
Powered by DoSelect

CHOOSE DATASETS No datasets attached with this snippet yet.

```
1 a <- 42
2 A <- a * 2 # R is case sensitive
3 print(a)
4 cat(A, "\n") # "84" is concatenated with "\n"
5 if(A>a) # true, 84 > 42
6 {
7   cat(A, ">", a, "\n")
8 }
9
10
```


R ▼ RUN CODE SAVE ⋮

STDIN

STDOUT

To output images or other files, write them under `/output` in your code.

6. How to Run your code:



YOUR SNIPPETS

Test1
↔ R ⌚ Today at 2:46 PM

Internet
↔ R ⌚ Last Thursday at 5:49 PM

Healthcare
↔ R ⌚ Last Thursday at 5:49 PM

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R ▼ RUN CODE SAVE ⋮

✓ Code execution successful.

STDIN

STDOUT

```
[1] 42
84
84 > 42
```

To output images or other files, write them under `/output` in your code.

7. How to perform visualization:



**Sample Code:

```
HData <- read.csv("/data/hospitalcosts.csv")
```

```
# mandatory statement to perform any visualization, the output will  
# be saved as a png file (i.e. plot.png) as mentioned below
```

```
png(filename = "/output/pairs.png")
```

```
hist(HData$AGE)
```

Lab Demo:

<https://community.simplilearn.com/threads/simplilearn-lab-demo-r.39661/>

The above mentioned community thread will guide, how to choose dataset for your R-Script and Run your code.