

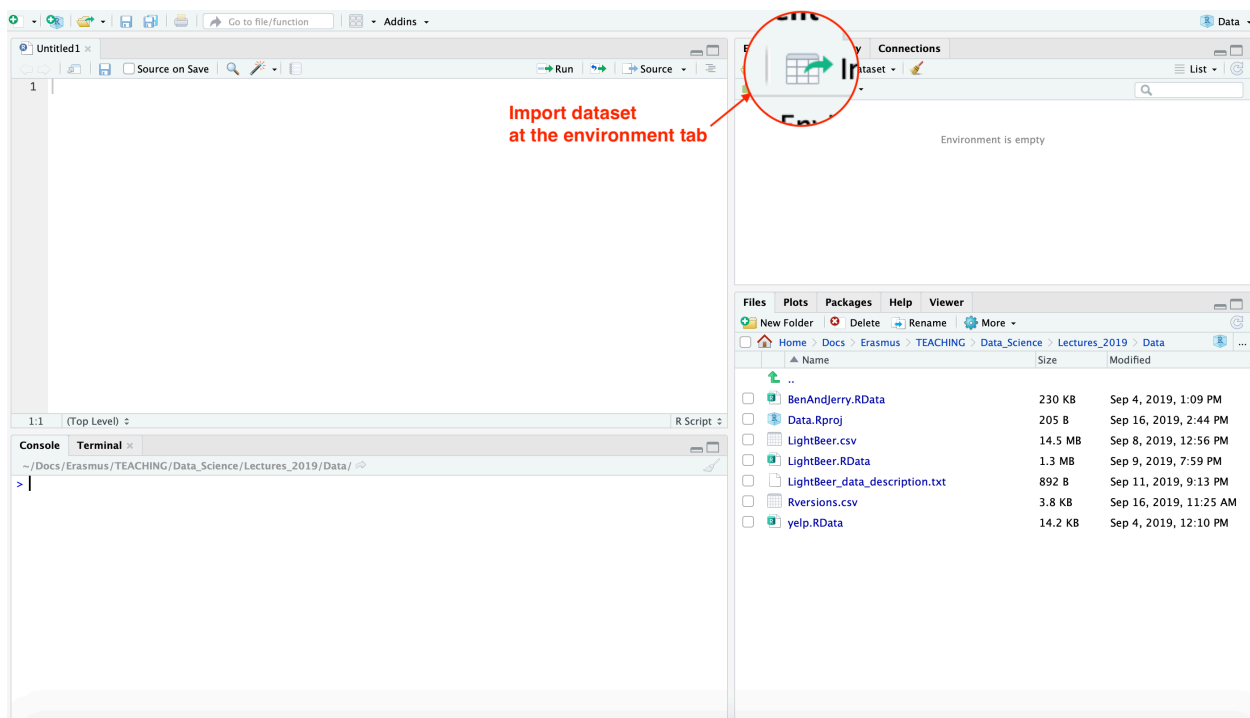
# Importing CSV files

Download the `Rversions.csv` from Canvas onto your local computer and use the import dataset feature of R Studio.

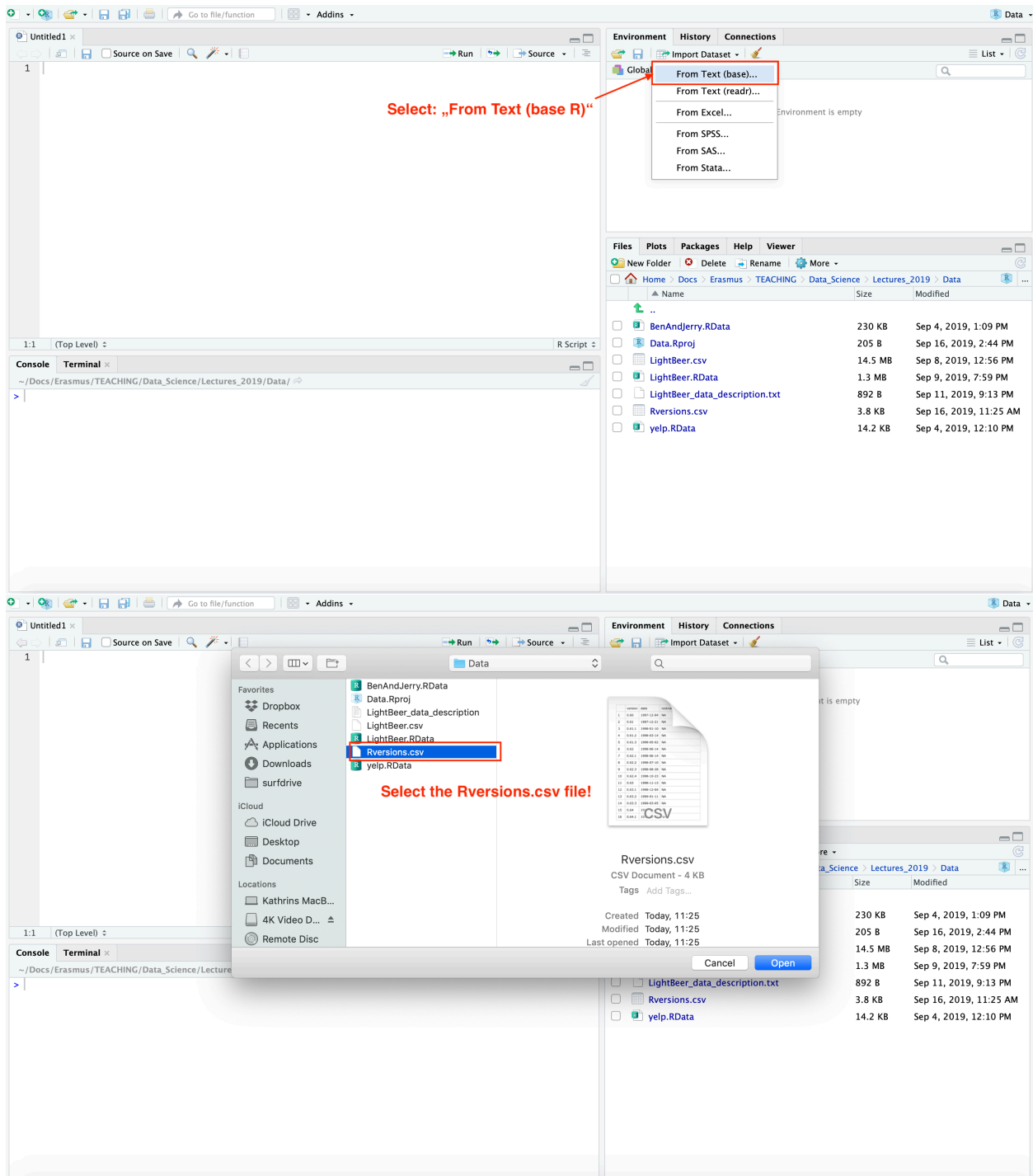
## Option 1: Base R

Step 1: Click on the **import** dataset button in the top-right section under the **environment** tab. Choose **From Text (base R)** and select the file you want to import. Next, the import dataset dialog will appear as in the example shown below:

## Importing .csv files - Step 1

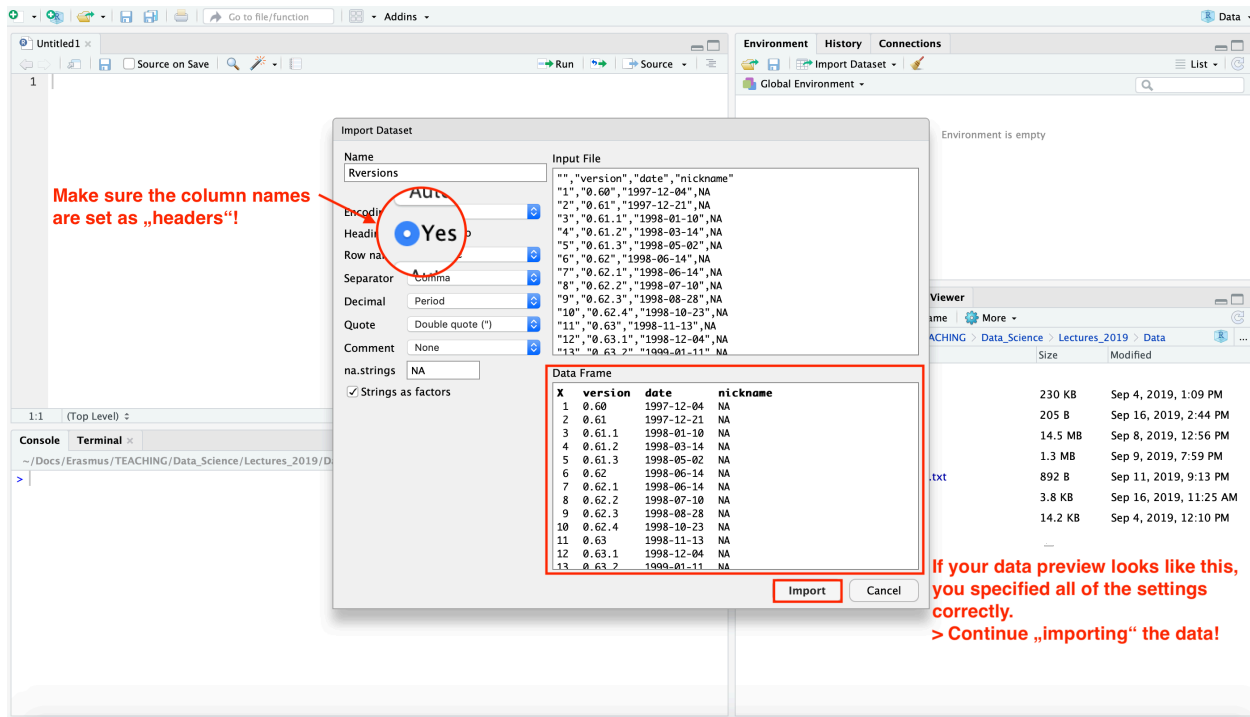


## ## Importing .csv files - Step 1



Step 2: Set up the preferences of separator, name and other parameters, click on the **import** button. The dataset will be imported in R Studio and assigned to the variable name as set before.

## ## Importing .csv files - Step 2



Make sure the column names are set as „headers“!

If your data preview looks like this, you specified all of the settings correctly.  
> Continue „importing“ the data!

## Headings:

- The first row of the data file is usually reserved for the header (best practice: use the first column to identify the sample unit).
- Note: short column names are preferred over longer names.

## Separator:

- .csv: the field separator character is set to , (or ; ) by default (**comma-separated** files).
- .txt: the field separator character is set to " " or white space by default (**tab-delimited** files). White spaces also indicate tabs, newlines or carriage returns.
- other formats: if your file uses another symbol to separate the fields of your data set (like e.g. /), indicate this by specifying the corresponding symbol in the separator field.

## Decimal:

- The Decimal field allows you to specify the character for the decimal mark.

## ## Importing .csv files - Step 2

The screenshot shows RStudio with the following components:

- Environment Pane:** Shows 'Data' with 'Rversions' (114 obs., 4 variables). A red box highlights this entry, and the text 'Success!!!' is written in red.
- Files Pane:** Shows the file structure: Home > Docs > Erasmus > TEACHING > Data\_Science > Lectures\_2019 > Data. The file 'Rversions.csv' is listed with a size of 3.8 KB.
- Console:** Shows the R code:

```
> Rversions <- read.csv("~/Docs/Erasmus/TEACHING/Data_Science/Lectures_2019/Data/Rversions.csv")
> View(Rversions)
```

## Option 2: readr

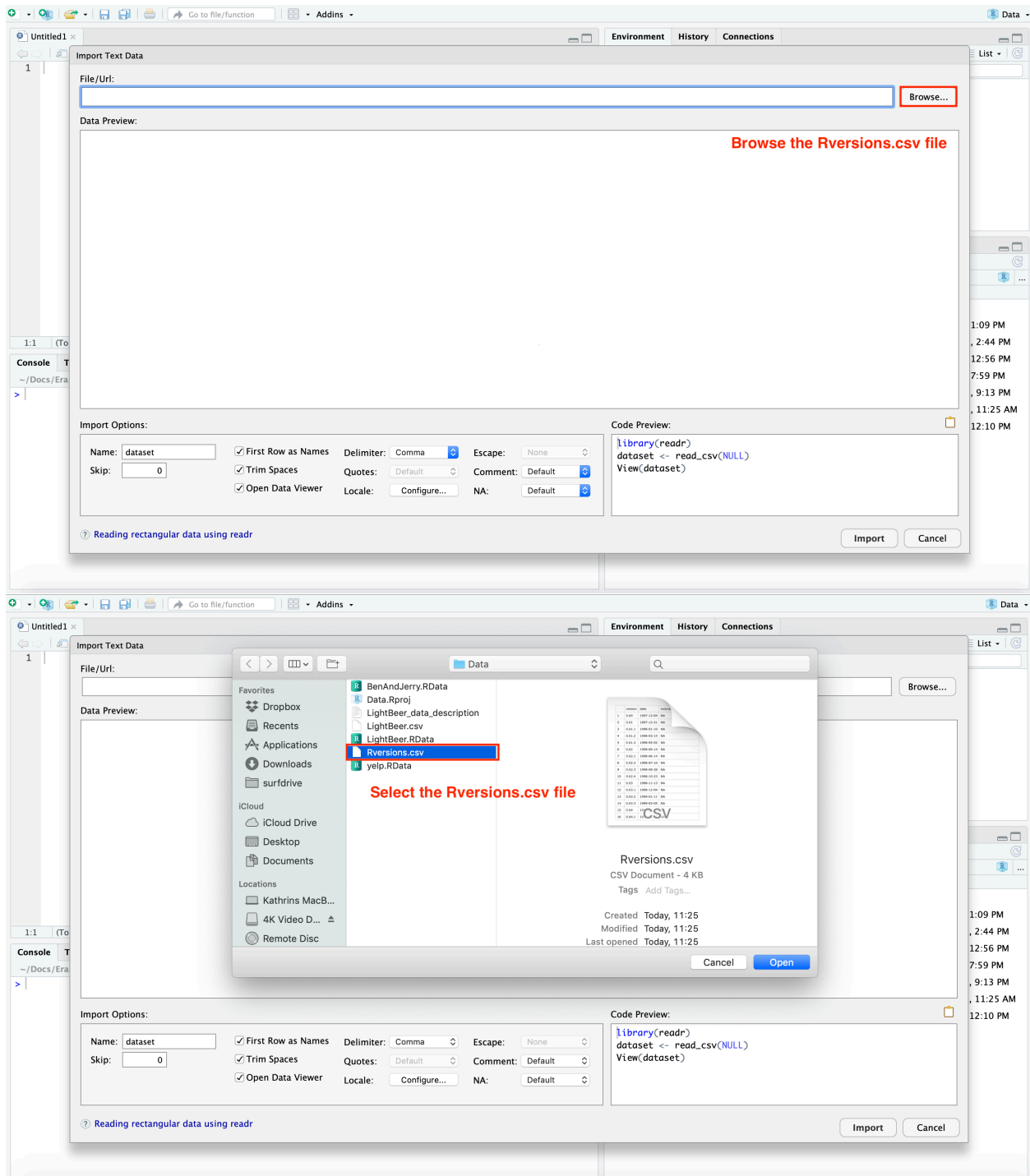
### ## Importing .csv files - Step 1

The screenshot shows RStudio with the following components:

- Environment Pane:** A red box highlights the 'From Text (readr)...' option in the 'Import Dataset' menu. A red arrow points to this option with the text 'Select „From Text (readr)“'.
- Files Pane:** Shows the same file structure as the previous screenshot, with 'Rversions.csv' listed.
- Console:** Shows the R code:

```
> 
```

## ## Importing .csv files - Step 1



## ## Importing .csv files - Step 2

The screenshot shows the RStudio interface during the import of a CSV file. The 'Import Text Data' dialog box is open, displaying a preview of the data from 'Rversions.csv'. The data has four columns: 'X1' (integer), 'version' (character), 'date' (double), and 'nickname' (character). The preview shows the first 14 rows of data. The 'Import Options' section is configured with 'Name: Rversions', 'Skip: 0', 'First Row as Names' checked, 'Trim Spaces' checked, 'Open Data Viewer' checked, 'Delimiter: Comma', 'Quotes: Default', 'Escape: None', 'Comment: Default', and 'NA: Default'. The 'Code Preview' section shows the R code used for import: 

```
library(readr)
Rversions <- read_csv("Rversions.csv")
View(Rversions)
```

. The 'Import' button is highlighted.

**Data Preview:**

X1 (integer)	version (character)	date (double)	nickname (character)
1	0.60	1997-12-04	NA
2	0.61	1997-12-21	NA
3	0.61.1	1998-01-10	NA
4	0.61.2	1998-03-14	NA
5	0.61.3	1998-05-02	NA
6	0.62	1998-06-14	NA
7	0.62.1	1998-06-14	NA
8	0.62.2	1998-07-10	NA
9	0.62.3	1998-08-28	NA
10	0.62.4	1998-10-23	NA
11	0.63	1998-11-13	NA
12	0.63.1	1998-12-04	NA
13	0.63.2	1999-01-11	NA
14	0.63.3	1999-03-05	NA

Previewing first 50 entries.

**Import Options:**

Name: Rversions Skip: 0

☒ First Row as Names ☒ Trim Spaces ☒ Open Data Viewer

Delimiter: Comma Quotes: Default Escape: None Comment: Default NA: Default

Code Preview:

```
library(readr)
Rversions <- read_csv("Rversions.csv")
View(Rversions)
```

**Environment:**

Global Environment

Data

Rversions 114 obs. of 4 variables

**Success!!!**

**Files:**

Name	Size	Modified
BenAndJerry.RData	230 KB	Sep 4, 2019, 1:09 PM
Data.Rproj	205 B	Sep 16, 2019, 2:44 PM
LightBeer.csv	14.5 MB	Sep 8, 2019, 12:56 PM
LightBeer.RData	1.3 MB	Sep 9, 2019, 7:59 PM
LightBeer_data_description.txt	892 B	Sep 11, 2019, 9:13 PM
Rversions.csv	3.8 KB	Sep 16, 2019, 11:25 AM
yelp.RData	14.2 KB	Sep 4, 2019, 12:10 PM

**Console:**

```
> library(readr)
> Rversions <- read_csv("Rversions.csv")
Parsed with column specification:
cols(
  X1 = col_integer(),
  version = col_character(),
  date = col_date(format = ""),
  nickname = col_character()
)
Warnmeldung:
Missing column names filled in: 'X1' [1]
> View(Rversions)
> |
```