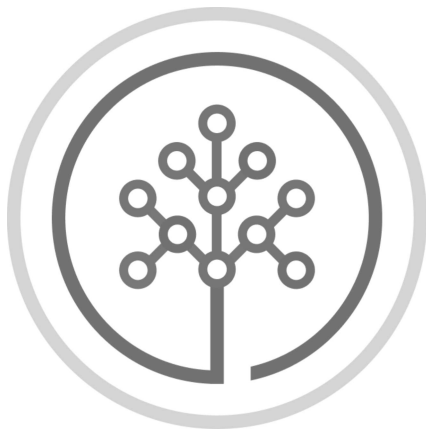


Getting started with RStudio and Installing packages



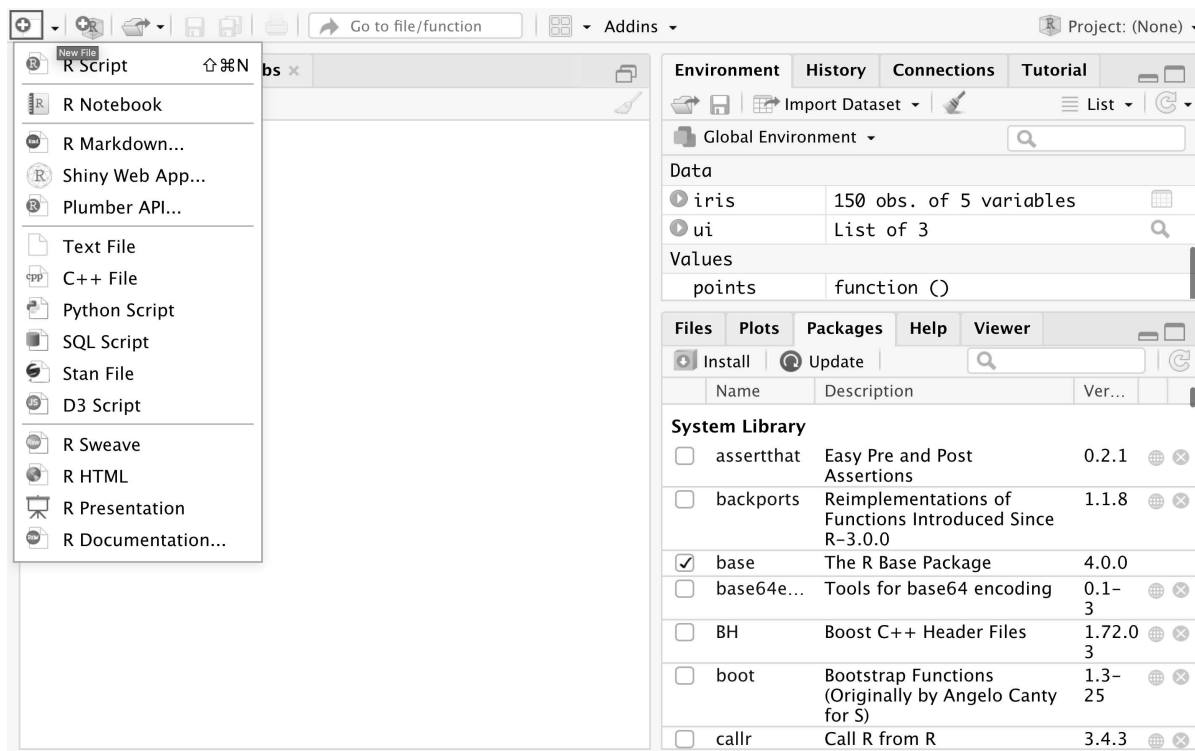
Skills Network

Objectives of Exercise:

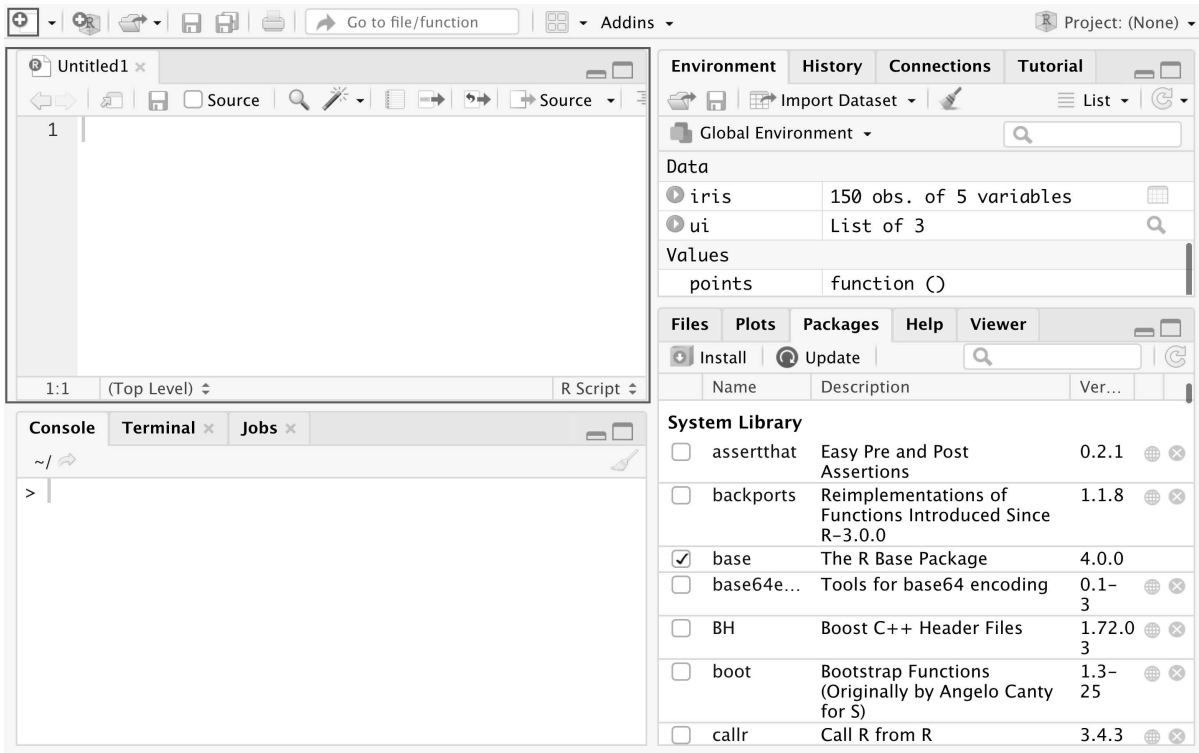
After completing this lab, you will be able to:

- Load the datasets
- Install libraries

Step 1 - Click the plus symbol on the top left and click R Script.



An untitled R Script panel opens. It would look like this.

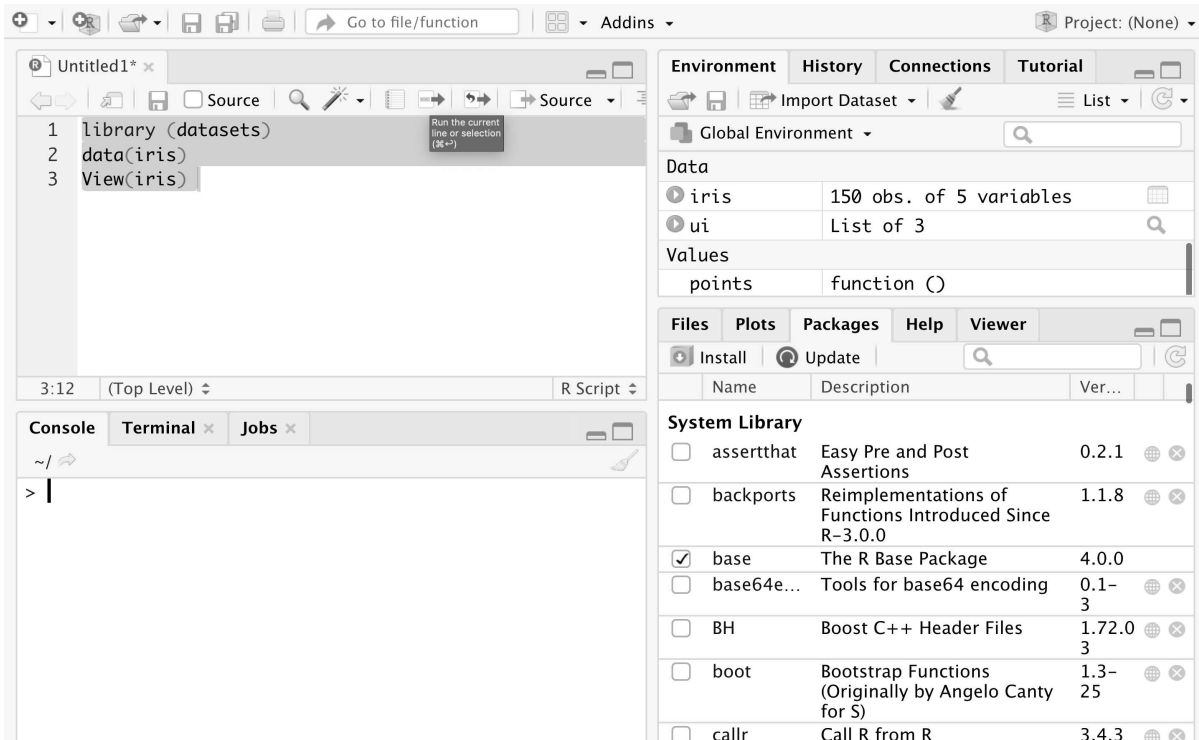


Step 2 - Now you load the iris dataset. Enter the following lines into the editor window that appears. Then select all the text, and click Run just above the editor window.

1. 1
2. 2
3. 3

1. library (datasets)
2. data(iris)
3. View(iris)

Copied!



Step 3 - You are taken to the data view tab to inspect your dataset. The dataset contains five columns and the first four are floating point type while the last column is a label of data type string which contains the category value. You can see there are total 150 entries of which you can see the first 7.

The screenshot shows the RStudio interface with the 'iris' dataset loaded. The top toolbar includes icons for file operations and a 'Go to file/function' search bar. The main window is divided into several panes:

- Environment**: Shows the 'Global Environment' with the 'iris' dataset (150 obs. of 5 variables) and a 'ui' object (List of 3).
- Data**: Displays the first 7 rows of the 'iris' dataset in a table format. The columns are 'Sepal.Length', 'Sepal.Width', 'Petal.Length', 'Petal.Width', and an unlabeled column (likely 'Species').
- Console**: Shows the R commands: `> library(datasets)`, `> data(iris)`, `> View(iris)`, and `> |`.
- System Library**: A list of installed R packages, including 'assertthat', 'backports', 'base', 'base64e...', 'BH', 'boot', and 'callr'.

The 'Data' pane shows the following data for the first 7 rows:

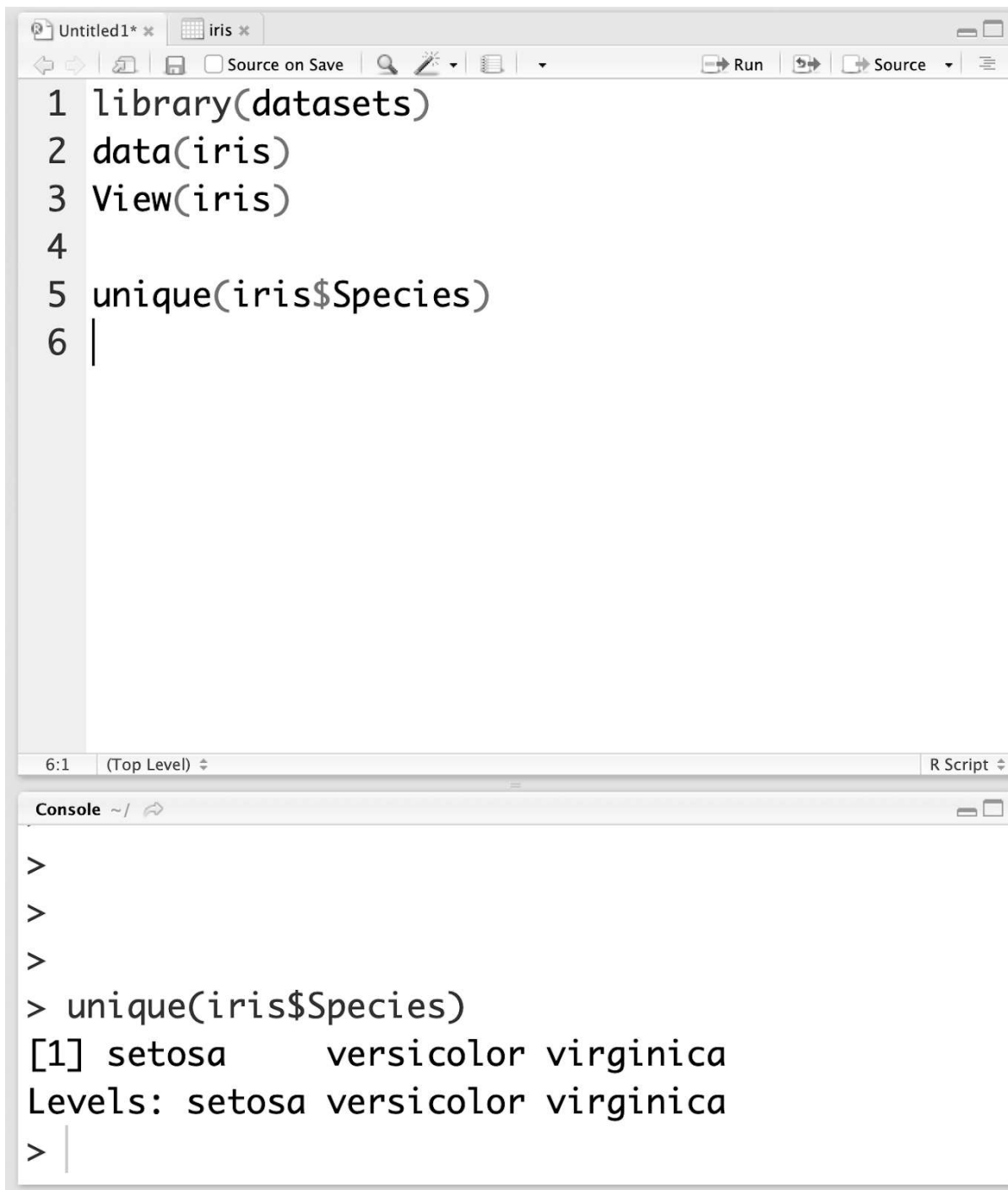
	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	
1	5.1	3.5	1.4	0.2	
2	4.9	3.0	1.4	0.2	
3	4.7	3.2	1.3	0.2	
4	4.6	3.1	1.5	0.2	
5	5.0	3.6	1.4	0.2	
6	5.4	3.9	1.7	0.4	

Step 4 - Now you can find the different species present in the data set. Enter the following command in the editor window and click Run.

1. 1

1. `unique(iris$Species)`

Copied!



The image shows a screenshot of the RStudio interface. The top pane displays an R script with the following code:

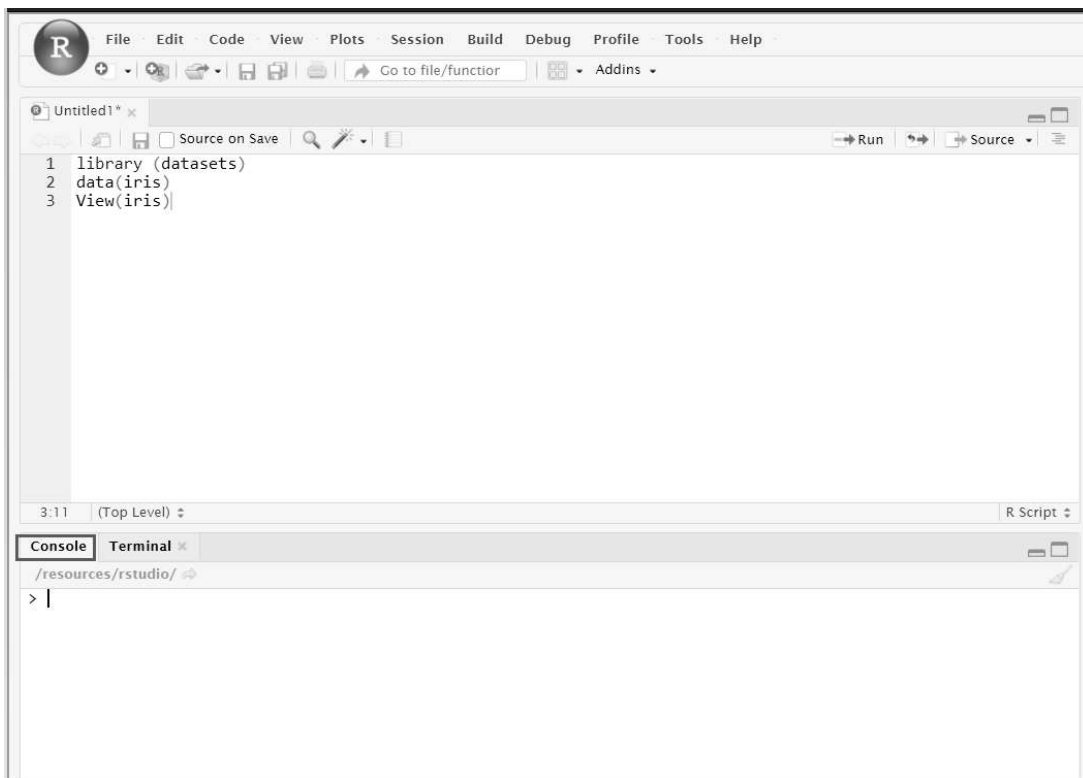
```
1 library(datasets)
2 data(iris)
3 View(iris)
4
5 unique(iris$Species)
6 |
```

The bottom pane shows the R console output for the command `unique(iris$Species)`:

```
>
>
>
> unique(iris$Species)
[1] setosa      versicolor virginica
Levels: setosa versicolor virginica
> |
```

In the Console window at the bottom you can see the result of the executed command and know that there are only three different species present in the data set.

Step 5 - Next you will look into the data set in more detail. Open a Console.

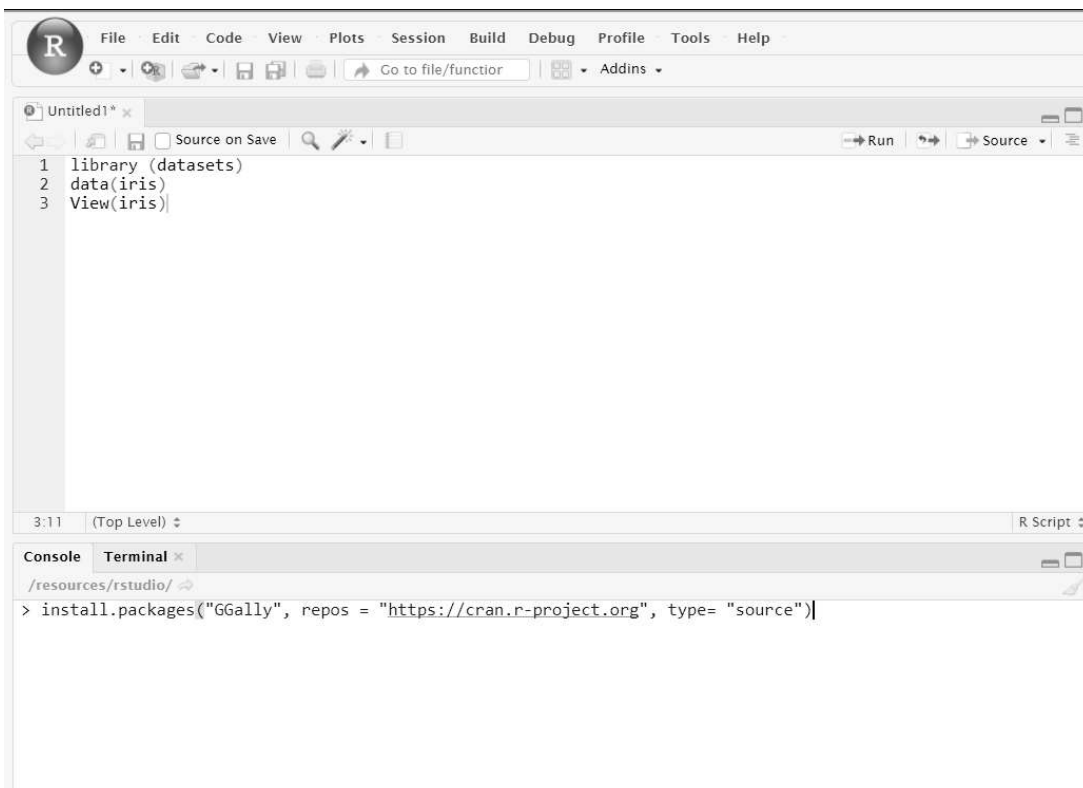


Step 6 - Run the following command in the console.

1. 1

1. `install.packages("GGally", repos = "https://cran.r-project.org", type = "source")`

Copied!



Step 7 - Click *Enter* to install the packages.

This concludes the lab; I hope you enjoyed it!

Author(s)

Romeo

Other Contributor(s)

Lavanya

Change log

Date	Version	Changed by	Change Description
2021-13-01	2.4	Malika Singla	Update the installation for R packages
2020-12-10	2.3	Aije	Moved plot steps to a new lab
2020-12-10	2.2	Malika Singla	Update the installation for R packages
2020-12-07	2.1	Aije	Changed instructions to use Skills Network Lab
2020-08-25	2.0	Lavanya	Migrated Lab to Markdown and added to course repo in GitLab

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