

# Skills Network

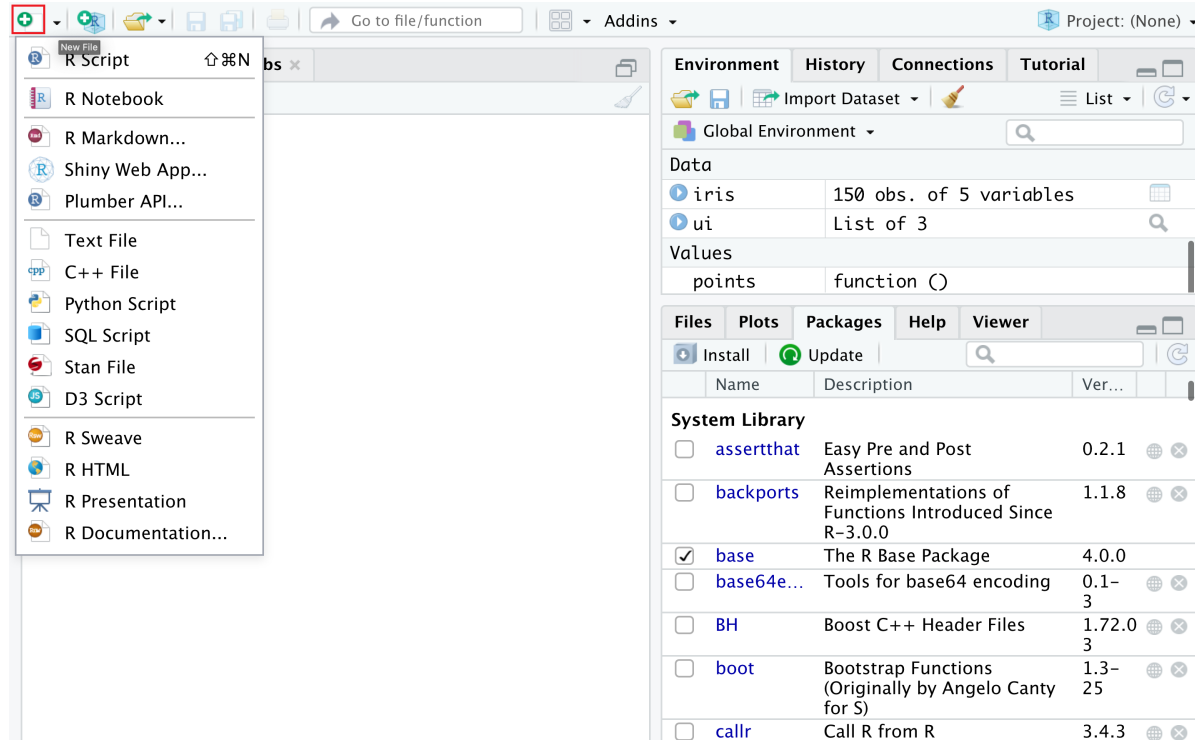
## Getting started with RStudio and Installing packages

### Objectives of Exercise:

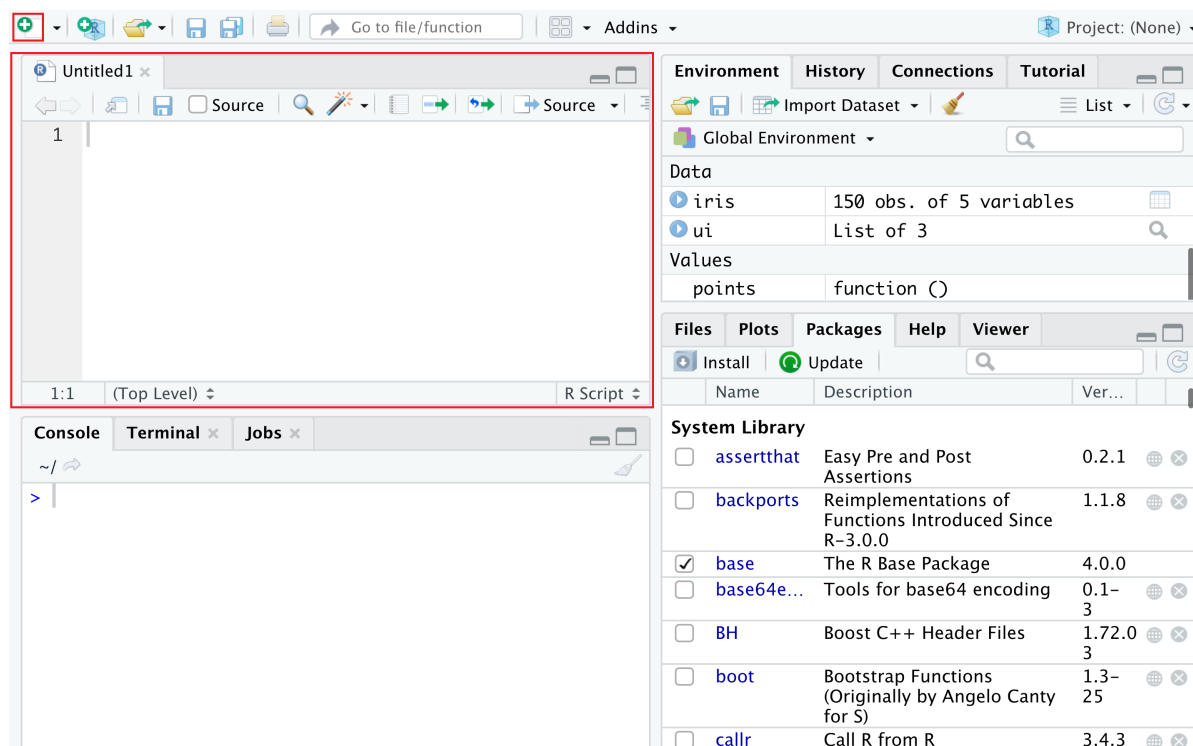
After completing this lab, you will be able to:

- 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!

The screenshot shows the RStudio IDE interface. The editor window has three lines of code: `library(datasets)`, `data(iris)`, and `View(iris)`. The Environment pane on the right displays the 'Global Environment' with two objects: 'iris' (150 obs. of 5 variables) and 'ui' (List of 3). The System Library pane lists various installed packages, including 'assertthat', 'backports', 'base', 'base64e...', 'BH', 'boot', and 'callr'.

**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 IDE interface with the 'View(iris)' data view tab selected. The data is displayed in a table with the following columns: Sepal.Length, Sepal.Width, Petal.Length, Petal.Width, and Species. The first 7 rows are visible. The Environment pane on the right displays the 'Global Environment' with two objects: 'iris' (150 obs. of 5 variables) and 'ui' (List of 3). The System Library pane lists various installed packages, including 'assertthat', 'backports', 'base', 'base64e...', 'BH', 'boot', and 'callr'.

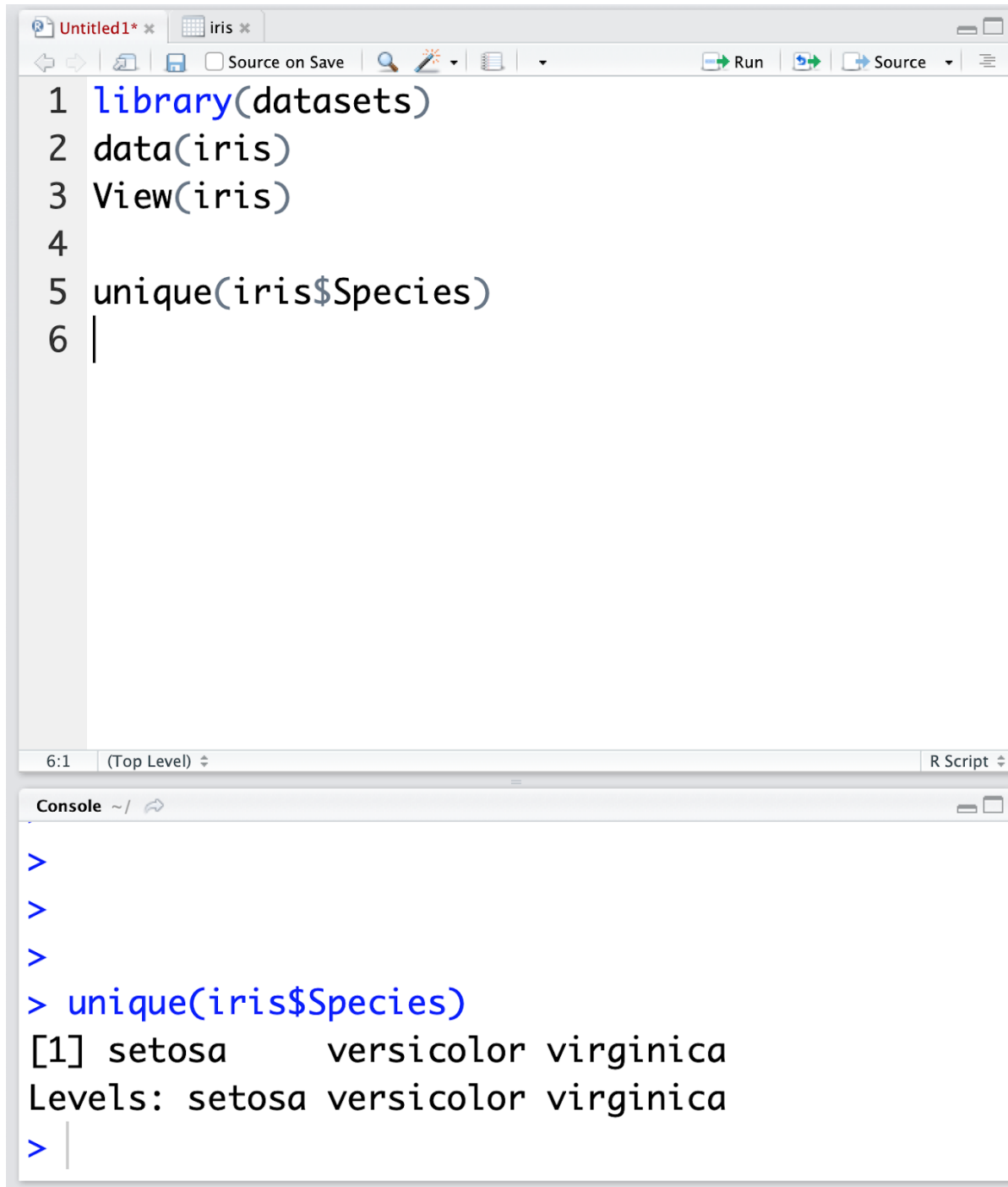
	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	5.1	3.5	1.4	0.2	setosa
2	4.9	3.0	1.4	0.2	setosa
3	4.7	3.2	1.3	0.2	setosa
4	4.6	3.1	1.5	0.2	setosa
5	5.0	3.6	1.4	0.2	setosa
6	5.4	3.9	1.7	0.4	setosa
7	4.5	3.0	1.6	0.4	setosa

**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. unique(iris$Species)
```

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The screenshot shows an RStudio IDE interface. The top window, titled 'iris', contains the following R code:

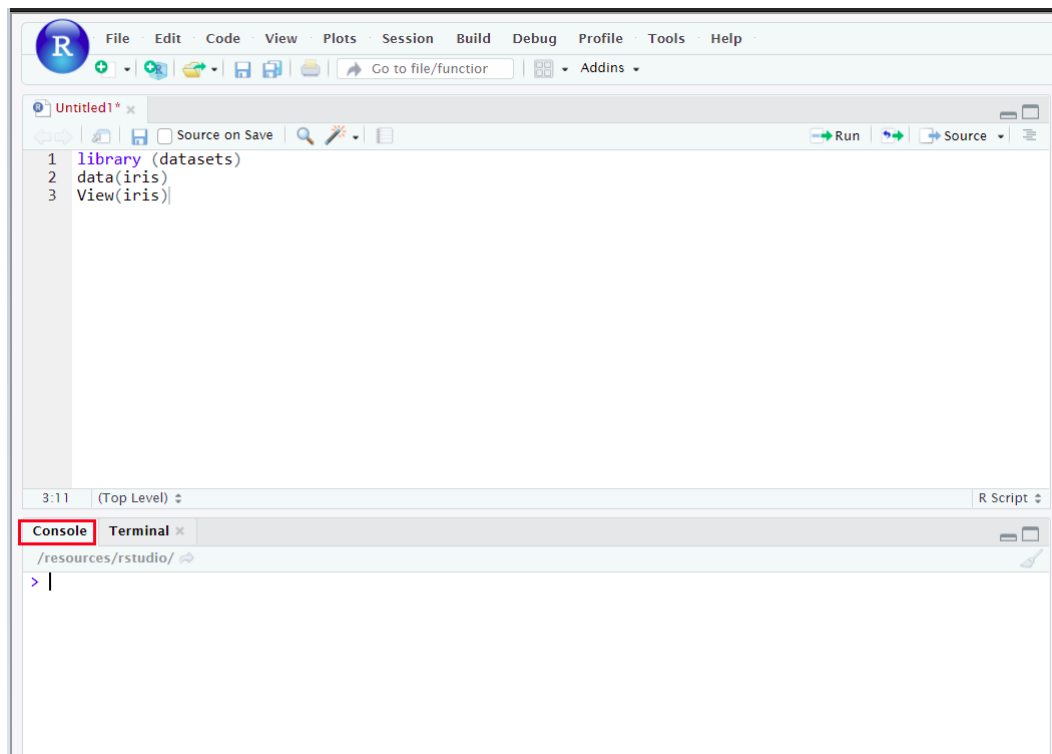
```
1 library(datasets)
2 data(iris)
3 View(iris)
4
5 unique(iris$Species)
6 |
```

The bottom window, titled 'Console', shows the output of the executed command:

```
>
>
>
> 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.

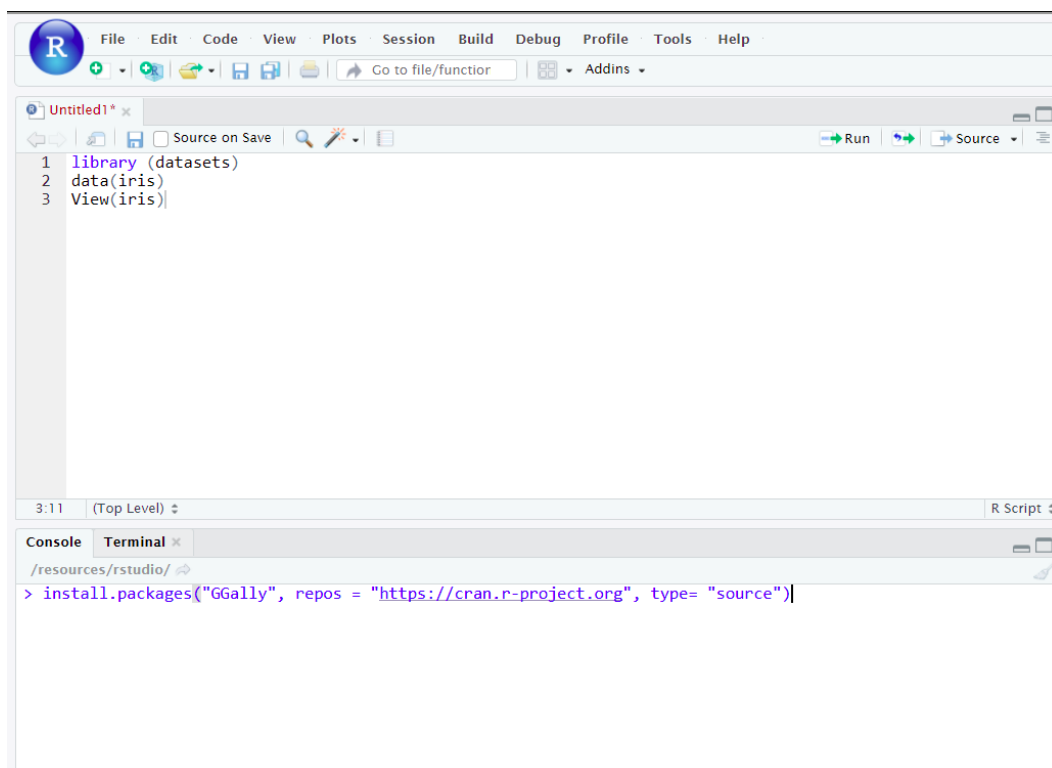
**Step 5** - Next you will look into the data set in more detail. Open a Console.



**Step 6** - Run the following command in the console.

- 1
1. `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
2023-07-09	3.0	Anita Verma	Changed to RStudio lab
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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