

# Skills Network

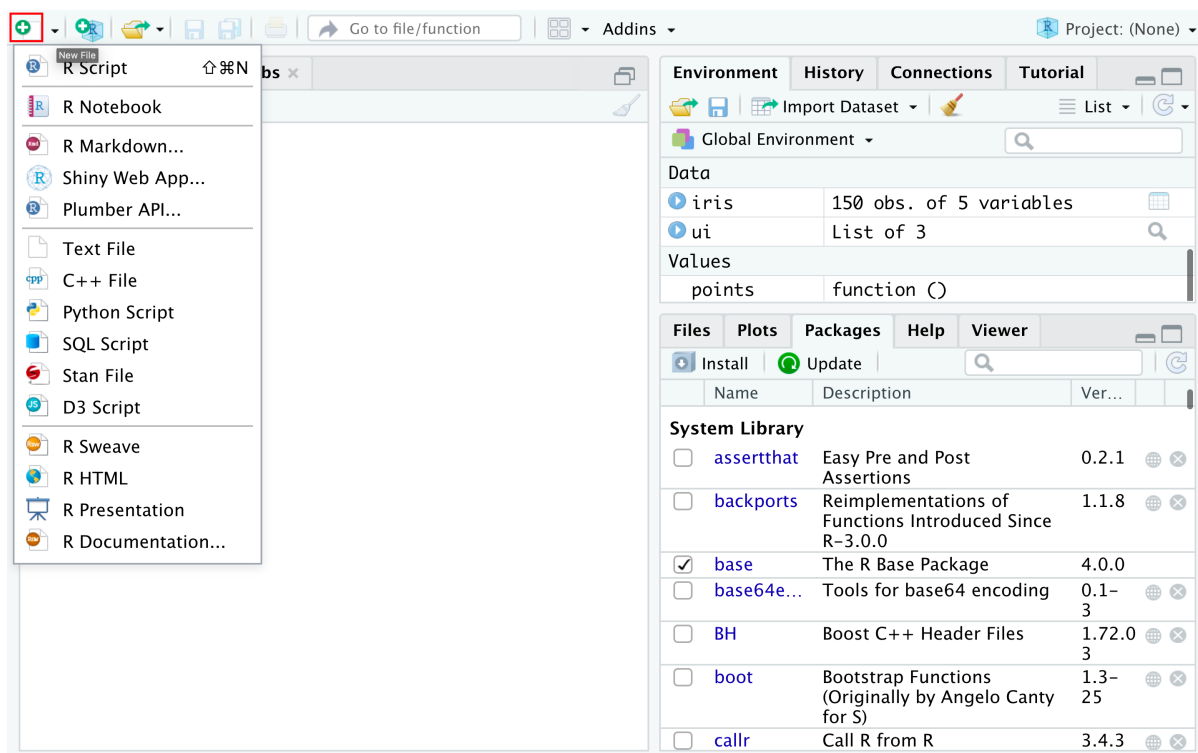
## Getting started with RStudio and Installing packages

### 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.

The screenshot displays the RStudio IDE interface. The top-left pane is a script editor titled 'Untitled1' with a red box highlighting the top toolbar. The top-right pane shows the Environment tab with 'Global Environment' selected. The bottom-left pane shows the Console with a prompt '>'. The bottom-right pane shows the Packages tab with a list of installed and available packages.

Name	Description	Ver...
<input type="checkbox"/> assertthat	Easy Pre and Post Assertions	0.2.1
<input type="checkbox"/> backports	Reimplementations of Functions Introduced Since R-3.0.0	1.1.8
<input checked="" type="checkbox"/> base	The R Base Package	4.0.0
<input type="checkbox"/> base64e...	Tools for base64 encoding	0.1-3
<input type="checkbox"/> BH	Boost C++ Header Files	1.72.0-3
<input type="checkbox"/> boot	Bootstrap Functions (Originally by Angelo Canty for S)	1.3-25
<input type="checkbox"/> callr	Call R from R	3.4.3

**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.

```
library(datasets)
data(iris)
View(iris)
```

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 Files pane shows the 'System Library' with a list of installed R packages including assertthat, backports, base, base64e..., BH, boot, and callr.

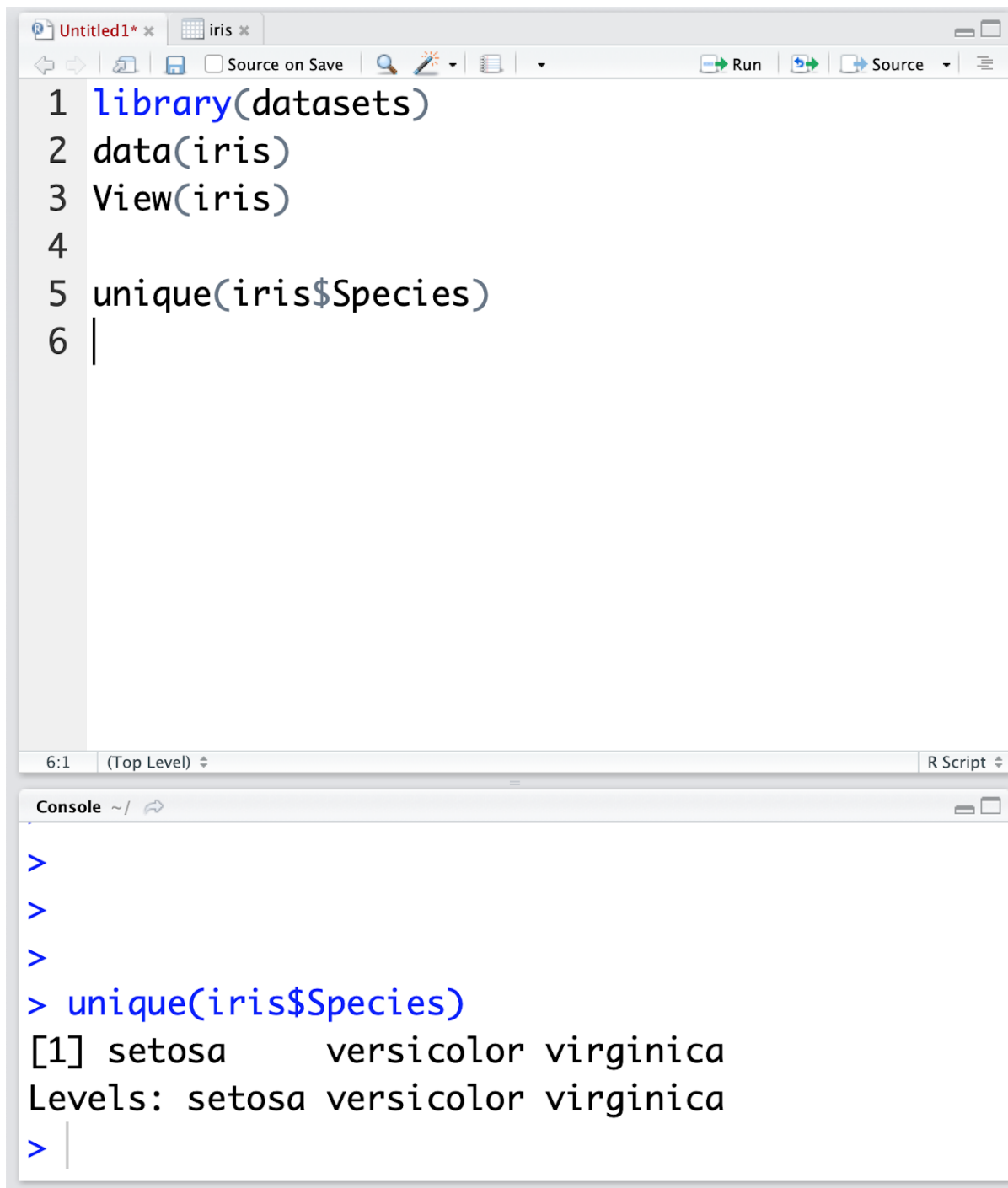
**Step 3** - You are taken to the data view tab to inspect your dataset. The dataset contains five columns and the first four are floating point type while the last column is a label of data type string which contains the category value. You can see there are total 150 entries of which you can see the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

The screenshot shows the RStudio IDE interface with the 'iris' dataset loaded. The editor window displays the 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 Files pane shows the 'System Library' with a list of installed R 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	4.4	3.7	1.5	0.2	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.

```
unique(iris$Species)
```



The screenshot shows an RStudio IDE window. The top pane contains the following R code:

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

The bottom pane is the Console, showing 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 dataset.

This concludes the lab; I hope you enjoyed it!

## Author(s)

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## **Other Contributor(s)**

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