

## 1 Online / Offline content

1. The online content of Spoken Tutorials can be accessed from :  
<https://spoken-tutorial.org/tutorial-search/>
2. You can also download the Spoken Tutorials for offline learning from :  
<https://spoken-tutorial.org/cdcontent/>
3. From this link download the FOSS categories in the language you wish to learn.
4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
5. Extract the contents of the zip file & access them.

## 2 The procedure to practise

1. You have been given a set of spoken tutorials and files.
2. You will typically do one tutorial at a time.
3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.

## 3 Side-by-Side learning video (only for offline content)

1. Go to the folder named spoken on your machine.
2. Locate `index.html` file.
3. Open this file with either **Firefox** or **Chrome** web browser.
4. The Side-by-Side learning video will appear. This video will explain how to learn from the spoken tutorials.
5. Click on the Play button to play the video.
6. Note all the steps explained therein.

## 4 R

1. Click on "Select FOSS Category" drop-down and choose "R".
2. Click on "Select Language" drop-down and choose the language (English).

3. Click on "Submit" button.

4. You will see a list of tutorials based on your selection.

5. Start with the first tutorial in the displayed list.

## 5 General instructions for R

1. To open a new R script, press **Ctrl + Shift + N** keys together.

2. To type the assignment operator (`<-`), press **Alt + -** keys together.

3. To type the pipe operator (`%>%`), press **Ctrl + Shift + M** keys together.

4. To run a block of code, select the block of code and click on **Run** (in the **Source** window). Alternatively, select the block of code and press **Ctrl + Enter** keys together.

5. To run an entire script, click on **Source** (in the **Source** window). If it does not display the results, from the drop-down menu of **Source**, click on **Source with Echo**. Alternatively, click anywhere in the script and press **Ctrl + Shift + Enter** keys together.

6. Depending upon the version of **RStudio** installed on your machine, you might have a different interface than that shown in the tutorials.

7. For the sake of convenience, four packages **plyr**, **MASS**, **ggplot2** and **dplyr** have already been installed (during the installation of **RStudio**). However some of the tutorials show the installation of these packages again. Please skip those steps and move further.

## 6 First tutorial: Overview of R and RStudio

1. Locate the topic **Overview of R and RStudio** and click on it.

2. This tutorial explains the features of R along with **RStudio** and provides an overview of this tutorial series.

3. To view the tutorial, click on the **Play** icon, which is located in the player.

## 7 Second Tutorial: Installing R and RStudio on Linux

1. If you are using Linux, locate the tutorial `Installing R and RStudio on Linux` and watch it.
2. If R and RStudio are already installed, please skip this tutorial.

## 8 Third Tutorial: Installing R and RStudio on Windows

1. If you are using Windows, locate the tutorial `Installing R and RStudio on Windows` and watch it.
2. If R and RStudio are already installed, please skip this tutorial.

## 9 Common Instructions

1. To view the tutorial, click on the `Play` icon which is located in the player.
2. The `Pre-requisite` will be visible below the player (only for Online contents).
3. `Outline`, `Assignments` and `Code Files` are available below the player.
4. Adjust the size of the browser in such a way that you are able to practise in parallel.
5. Instructions to use Code files in any tutorial: (a) Click on the link `Code files` located below the player and save it in your folder.  
(b) Extract the downloaded zip file.  
(c) You will see all the code/source files used in the particular tutorial.  
(d) Use these files as per the instructions given in the particular tutorial.
6. Play-pause-practise the whole tutorial.
7. Attempt the `Assignments` as instructed.
8. Save your work in your folder.
9. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
10. Follow all the above instructions, till you complete all the tutorials in the series.

## 10 Fourth Tutorial: Introduction to Basics of R

1. At 2:23, you won't have `Untitled1` open if you are opening RStudio for the first time. To have

`Untitled1`, click in the Console window and press `Ctrl + Shift + N` keys together.

2. At 9:56, the video asks to hit `Return`. Please hit `Enter` if you are using a computer other than Mac.

## 11 Fifth Tutorial: Introduction to Data Frames in R

1. For Windows operating system, the file `NewCaptaincy.csv` will be saved in the Documents folder. To view this file, open it with Notepad or any other compatible text editor.
2. For Linux operating system, the file `NewCaptaincy.csv` will be saved in the home directory. To view this file, open it with `gedit` or any other compatible text editor.
3. At 9:37, the video shows to click `From Text File`. If you are using a higher version of RStudio, click on `From Text (base)`.

## 12 Twelfth Tutorial: Merging and Importing Data

1. This tutorial requires installation of some packages like `libxml2-dev`, `XML`, `readxl` and `Rcpp`. **Please skip this tutorial, in case you are not connected to the Internet.**
2. At 9:05, the video asks to install `libxml2-dev` before installing `XML` package on Ubuntu OS. To install this package, Ubuntu OS user should follow the steps given below:  
Step 1: Open the terminal by pressing `Ctrl + Alt + T` keys together.  
Step 2: Type the command `sudo apt-get update` and press enter.  
Step 3: If prompted for the password, type your password and press enter.  
Step 4: Type the command `sudo apt-get install libxml2-dev` and press enter.  
Resume the tutorial once the packages are installed.  
★ Please note, for Windows OS, this package is not needed.
3. At 12:00, the video demonstrates how to import an Excel file from user interface of RStudio. Two packages; `readxl` and `Rcpp`, are required to export Excel files in R. If these packages are not installed and you are trying to import an Excel file, a pop-up message will appear. Click on "Yes" to begin the installation. Resume the tutorial after the package is installed.