

Before Live Tutorial

30/07/2019

Before the live tutorial

During the live tutorial, you will be using R Studio and editing R markdown files. Please install R and R Studio on your computer before the live tutorial, so that you can follow along.

This tutorial is intended for those who have some basic programming experience in R. The following reading is recommended if you would like to refresh some basics for programming in R:

- Chapter 2: The Very Basic from “Hands-On Programming with R” by Garrett GrolmundLink¹

¹ <https://rstudio-education.github.io/hopr/basics.html>

Installing R and IDE

If you have not installed R on your computer:

1. Go to <https://cran.r-project.org/>
2. Click **Download R for Mac/Windows**
3. Download the appropriate file:
 - **Windows user** - click Base and download the installer for the latest R version
 - **Mac user** - select the file *R-3.X.X.pkg* that matches with your OS version
4. Follow the instructions of the installer

If you have not installed R Studio for desktop:

1. Go to RStudio for desktop
2. Select the appropriate installer for your computer
3. Follow the instructions of the installer

How to install packages

A package is a fundamental unit of share-able code. There are 3 main repositories of packages: *CRAN*, *Bioconductor*, and *GitHub*.

```
# how to install packages from CRAN  
install.packages("packagename_1")
```

```
install.packages(c("packagename_1", "packagename_2"))
```

```
# how to install packages from GitHub
```

```
install.packages("devtools")
```

```
devtools::install_github("username/packagename")
```

For our course, please install the tidyverse package, which is a collection of packages.

```
install.packages("tidyverse")
```