

# R Language Course: RStudio, Reporting

#### Introduction to the R language

Introduction
What is R?
Discover the analytical aspect
The business intelligence side of R / RStudio
The areas of use of R
Discover RStudio

### Getting started with the RStudio environment

Install RStudio
Configure RStudio
Use the console
Install a package
Use of aids
Discover the Markdown

## The basics of the R language

The variables
The functions
Calculations
Evaluate flow conditions and controls
curls
Create custom features
Calculate the execution time
Data structure: matrix
Data structure: ts

Data structure: Date and time

Data structure: factor Work environments

# Manipulate data structures

The vectors
The lists



Matrices **DataFrames** 

#### Draw a parallel between R and a spreadsheet

Adapt in R / RStudio spreadsheet operations. Adapt the spreadsheet functions to R / RStudio. Import and export data (spreadsheet versus R / RStudio) Exploit the best of both software.

#### Handling data with R

Importing data Exporting data Selection and grouping of data

#### Case Study: Consolidate the Basics of R Language and RStudio Software

Using tidyverse for more efficiency Tidyverse modules: dplyr, ggplot2, tibble, readr, tidyr, purrr Data preparation Import (and export) datasets. Understanding the data (Explore and visualize) Process missing values Process outliers. Model: select, filter, sort, modify, add, delete. Manipulate categorical data. Manipulate time series. Produce PDF, HTML, etc. reports

#### View data with R

Realization of graphs with R software Customize graphs with R software Draw maps with R software

#### Other Related Courses

Python Training for Data Science