RBasic

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## Outlook

* Introduction
* Data types
* Data manipulation
* Read Data
* Plotting
* Exercise
* Work on your data
* Write functions

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## Introduction

R is a free software.

R is a statistical software.

R is powerfull. (This presentation has been made in R)

R has a wide community of supporters

R is popular.

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## Introduction

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## R and RStudio installation

**R** => http://www.r-project.org

**RStudio** => http://www.rstudio.com

## Data types

1. Vector

x <- c(1,2,3,4,5,6,7,8,9)  
x

## [1] 1 2 3 4 5 6 7 8 9

1. Matrix

y <- matrix(x, nrow = 3)  
y

## [,1] [,2] [,3]  
## [1,] 1 4 7  
## [2,] 2 5 8  
## [3,] 3 6 9

## Data manipulation

1 + 1

## [1] 2

4 - 5

## [1] -1

2 \* 2

## [1] 4

4 / 2

## [1] 2

## Data manipulation

Built-in functions

sqrt(25)

## [1] 5

abs(-2)

## [1] 2

log2(2)

## [1] 1