



# Introdução à linguagem R

## Instalação de Pacotes Arquivos Help



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# 1 – Instalando pacotes no Rstudio – linha de comando

- Utilizando função `install.packages()`.

- > `install.packages("ggplot2")` # instala o pacote ggplot2

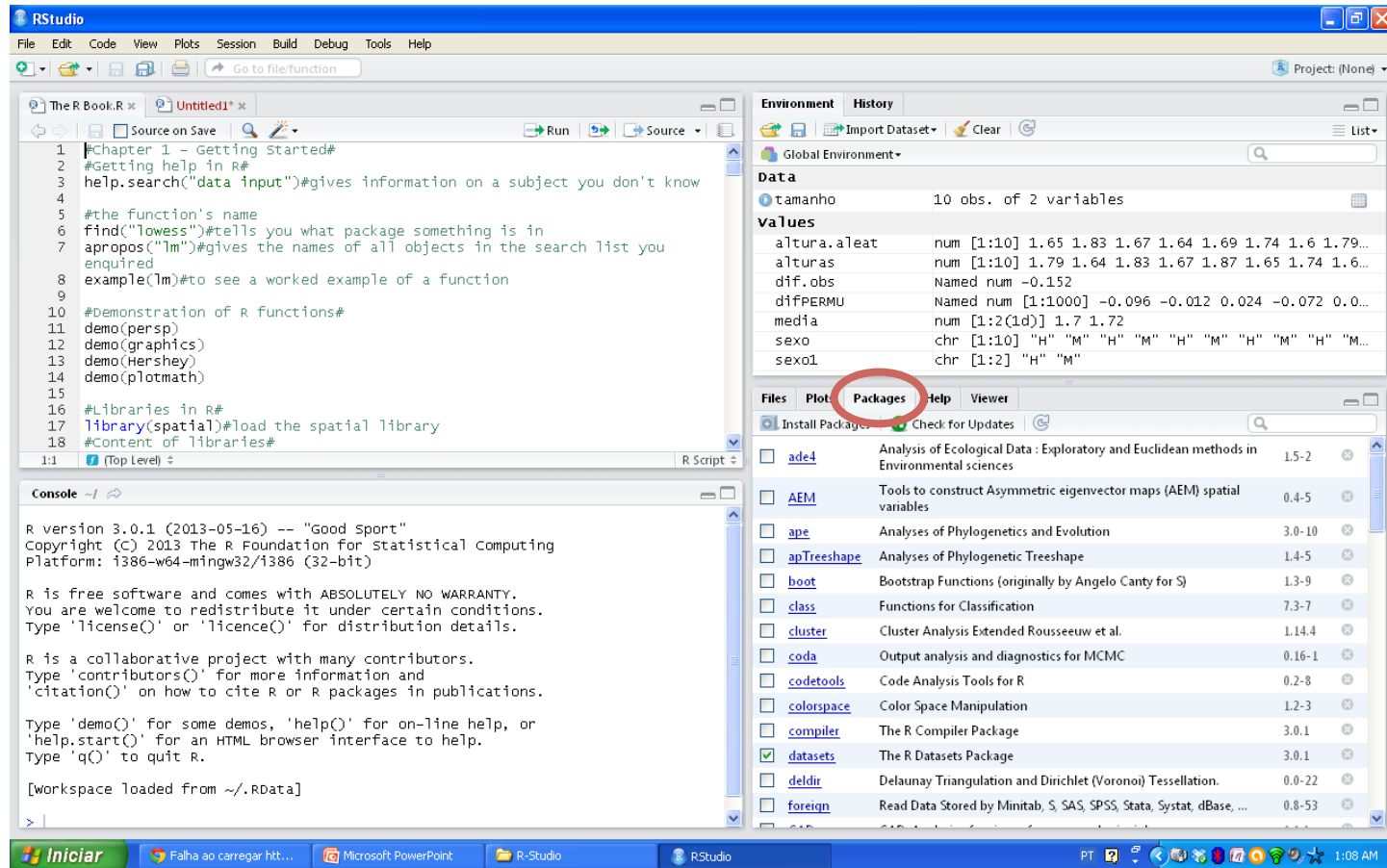
- > `install.packages("https://cran.rstudio.com/bin/macosx/mavericks/contrib/3.2/ggplot2_2.1.0.tgz")` # instala o pacote acessando o endereço online

- > `install.packages("tidyr")` # instala o pacote tidyr

- > `require(ggplot2)` # equivalente a função `library()`

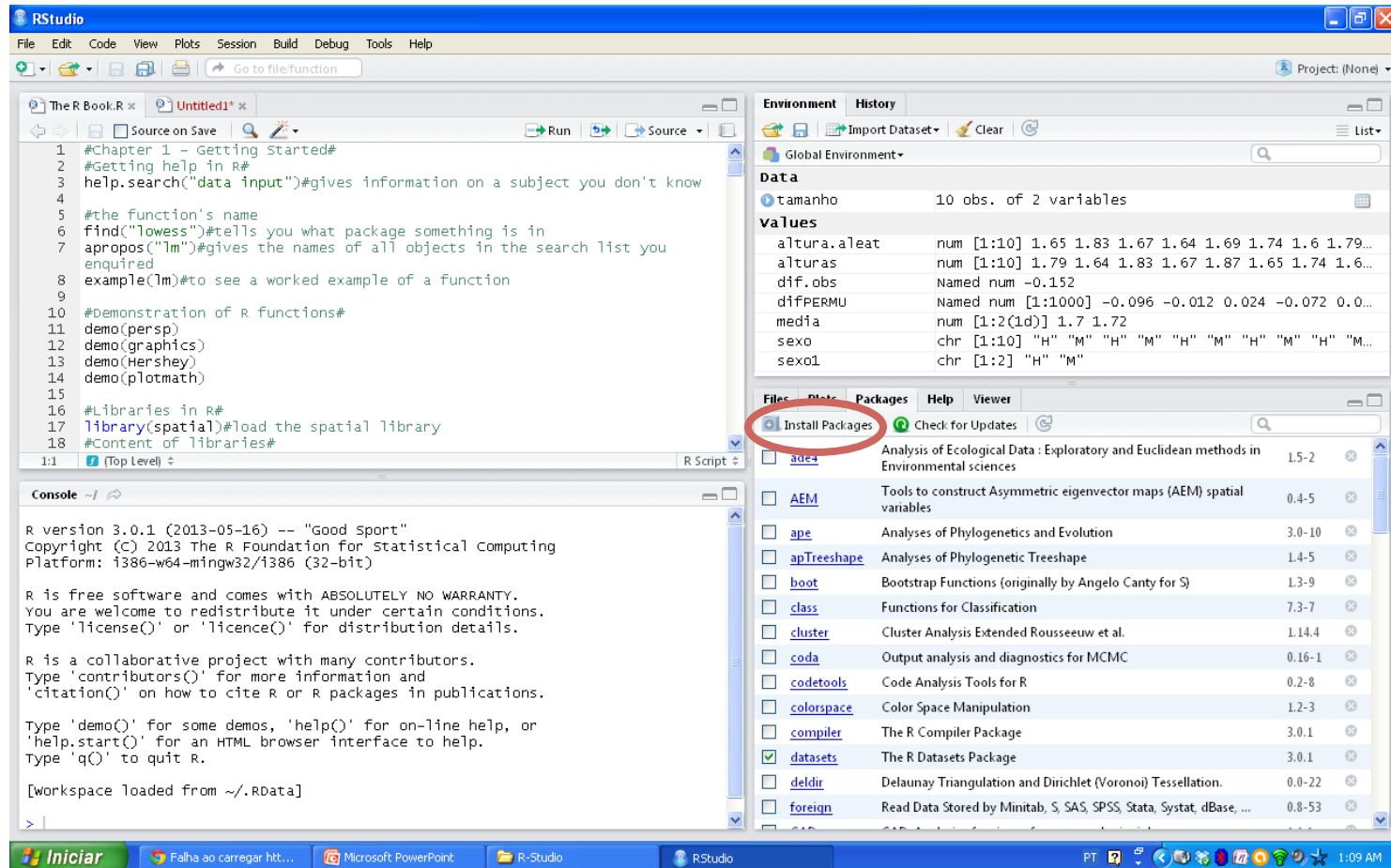
# 1 – Instalando pacotes no Rstudio – interface RStudio

- Clique em Packages.



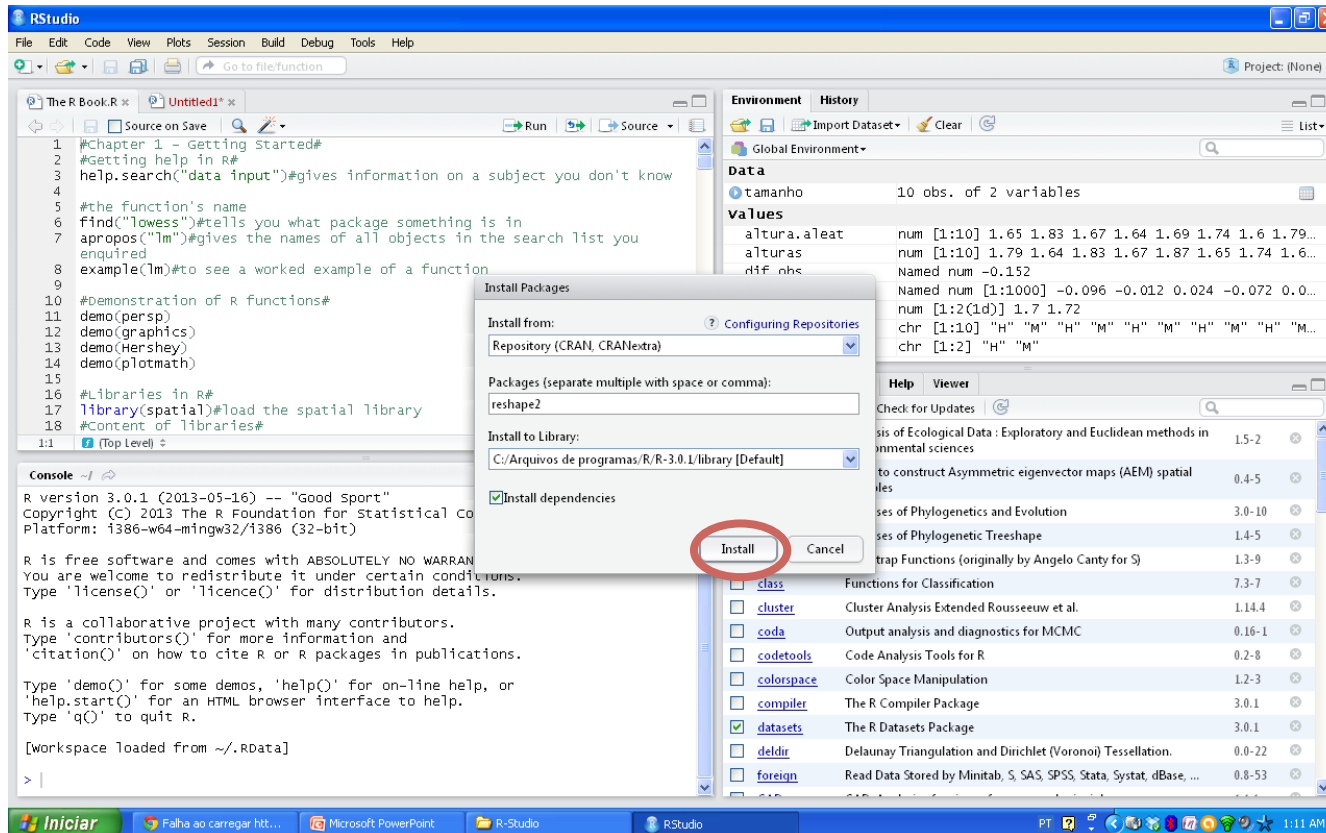
# 1 – Instalando pacotes no Rstudio – interface RStudio

- Clique em Install Packages.



# 1 – Instalando pacotes no Rstudio – interface RStudio

- Digite o nome do pacote e em seguida clique em Install. Ex: dplyr



> library(dplyr) # torna o pacote dplyr disponível para uso

## 2 – Utilizando um arquivo help – linha de comando

- Utilizando função `help()`.

> `help(sum)` # mostra o arquivo help da função `sum`

> `?sum` # equivalente a função `help()`

> `example(sum)` # mostra o exemplo do help da função com os resultados

> `library(help = "base")` # fornece uma lista com todas as funções do pacote

> `??variance` # lista os pacotes instalados com a palavra `variance` na descrição

## 2 – Utilizando um arquivo help – interface RStudio

The screenshot shows the RStudio interface with the following components:

- Script Editor:** Contains R code for installing the `readxl` package and using the `help` function. The code is as follows:

```
6 install.packages("readxl")
7
8 ##### Arquivos help #####
9
10 help(sum) # mostra o arquivo help da função sum
11 ?sum # equivalente a função help()
12 example(sum) # mostra o exemplo do help da função com os resultados
13 library(help = "base") # fornece uma lista com todas as funções do pacote
14 ??variance # lista os pacotes instalados com a palavra sum na descrição
15 ?var|
16
```
- Console:** Displays error messages from the previous code execution:

```
cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
> ??matrix # lista os pacotes instalados com a palavra sum na descrição
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
Error in as.character(tools:::httpdPort) :
  cannot coerce type 'closure' to vector of type 'character'
> |
```
- Environment/History:** Shows the global environment with variables `mdat` (numeric vector) and `xm` (numeric scalar).
- Help Pane:** The **Help** tab is selected, showing the documentation for the `variance` function. A red arrow points to the **Help** tab. The documentation includes the title "Correlation, Variance and Covariance (Matrices)", a description of the `var`, `cov`, and `cor` functions, and usage examples.