Basic concepts with R (part 4)

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1 Introduction

In this tutorial we will work with data frames. On my little experience using R for language analysis, data frames are probably the most useful data structure. It is also important to say that there is a number of operations on data frames that probably will not be covered in this tutorial, mostly because they are so many, that we will learn them along the way.

2 Data Frames

Data frames are matrices like two-dimensional rectangular structures. However, they bring an important difference: data frame columns do not need to be all of the same data kind. In other words, we cam mix up, numbers, characters, logical, date in a complex table. Naturally there are restrictions, since such a freedom concerns only the kind of data represented within each column. for example, in the table that follows:

```
names <- c('Astolfo', "Eleutério", "Alarico", "Genésia","Gioconda","Ondina")
birthdays <-as.Date(c("1907-06-22","1987-07-12","1941-11-10", "1940-11-15","1910-07-03","1982-06-21"))
gender <-c("male","male",'male', "female","female","female")
life.status <-c(FALSE,TRUE,FALSE,TRUE,FALSE,TRUE)
possible.age <-c(113,33, 79,80,110,38)
my.data.frame <-data.frame(names,birthdays,gender,life.status,possible.age)
colnames(my.data.frame) <-c("Names", 'Birthdays',"Gender","Life Status","Possible Age")
my.data.frame
```

```
##       Names  Birthdays Gender Life Status Possible Age
## 1   Astolfo 1907-06-22   male       FALSE          113
## 2 Eleutério 1987-07-12   male        TRUE           33
## 3   Alarico 1941-11-10   male       FALSE           79
## 4   Genésia 1940-11-15 female        TRUE           80
## 5  Gioconda 1910-07-03 female       FALSE          110
## 6    Ondina 1982-06-21 female        TRUE           38
```