
Course: Basics of R programming language for statistical analysis

Instructor: Marina FERENT [marinaferent@gmail.com]

Meeting 2: Basic notions

Exercises

REPRODUCE Tasks:

1. rBasics_Meeting2.r/line 114: EXERCISE_POINT_1: Compute the absolute and relative frequencies for variable <<education>> and <<pass>>.

(Estimated time: 15 min)

COMMENT Tasks:

1. rBasics_Meeting2_COMMENT folder/extractEurostat.r: Comment the R code.

(Estimated time: 45 min)

DEBUG Tasks:

1. rBasics_Meeting2_DEBUG folder/extractTablesPDF.r: After running line 21, R returns: Error in library(miniUI) : there is no package called ‘miniUI’. Solve the error and run the entire code.

(Estimated time: 20 min)

PRODUCE Tasks:

1. rBasics_Meeting1.r/line 113: EXERCISE_POINT_1: Change the column names of the absFreq data frame to <<"age" | "absFreq" | "relFreq">>. At this point the names are <<"age" | "Freq" | "V3">>.

(Estimated time: 15 min)

2. rBasics_Meeting2.r/line 187: EXERCISE_POINT_3: Search for other formats you can save your plot in.

[Estimated time: 5 min]

3. rBasics_Meeting2.r/line 201: EXERCISE_POINT_4: Add % to pie chart slices. Add a colour legend instead of labels.

[Estimated time: 15 min]

4. Import the <<Farmec clients data.csv>>. It contains data on 10 people that saw the Farmec marketing campaign for their MicellaR wateR product:
   - ➔ The age of the respondents (age)
   - ➔ The channel through which they saw the campaign (exposure):
     *1=online
     *2=offline
     *3=both online and offline
   - ➔ (decision):
     *1=they bought the product
     *2=they did not buy the product
   - ➔ income

a) Plot age and exposure on a single graph -> cross tabbed/conditional/grouped bar chart:

*age conditioned by exposure (age in case exposure=1, age in case exposure=2, age in case exposure=3)

[Estimated time: 20 min]

b) Plot age, exposure and decision on a single graph

-> cross tabbed/conditional/grouped bar chart:

-age conditioned by exposure (age in case exposure=1, age in case exposure=2, age in case exposure=3)

-bar colour: decision

[Estimated time: 20 min]

c) Plot the age, income, and decision on a single graph.

->line graph:

- oX: age

- oY: income

- bullet colour: decision

[Estimated time: 20 min]