**Exam R[¶](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb" \l "Exam-R)**

Mark Klik & Misja Mikkers

**Introduction**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#Introduction)

Before you turn this problem in, make sure everything runs as expected. First, **restart the kernel** (in the menubar, select Kernel→→ Restart) and then **run all cells** (in the menubar, select Cell→→ Run All).

Make sure you fill in any place that says YOUR CODE HERE or "YOUR ANSWER HERE", as well as your name and collaborators below:

In [6]:



NAME = "Mateo Malbasic, 2009362"

COLLABORATORS = ""

. . .



Fill in the cell above to provide us with your name and student number, like

​

NAME = "Adam Smith, #student number#"

​

where you replace "#student number#" with your ... (very good!)

​

Unfortunately, you are not allowed to work with "COLLABORATORS" in this exam.

​

## exam September 21th, 2018

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With this R part of the exam you can earn at max. 4 points.

​

In the first cell of the notebook, give us your name and student number in the way indicated above.

​

Fill in the notebook (see below for code cells and text cells that you need to fill in).

​

If you look at the menus above (File, Edit, View etc.), there is one called "Cell". If you click on this, you can change the "Cell Type". Choose "Code" when you are typing python or R code. Choose "Markdown" when you are typing, well, markdown.

​

When you finish the notebook, make sure that you save it with the output of your code included.

​

Then put it on github, e.g. by dragging it onto github (see instructions below).

​

Finally, add a link to your README file with the name of this exam: "Exam R September 7, 2018".

​

# Packages

​

You will need the following packages for this exam.

Fill in the cell above to provide us with your name and student number, like

NAME = "Adam Smith, #student number#"

where you replace "#student number#" with your ... (very good!)

Unfortunately, you are not allowed to work with "COLLABORATORS" in this exam.

**exam September 21th, 2018**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#exam-September-21th,-2018)

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**Packages**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#Packages)

You will need the following packages for this exam.

In [7]:



library(tidyverse)

​

. . .



# Assignment 1

​

## Data

​

Please read in "Medicaid.csv" and check the structure.

​

If needed change the variables Recipients and Total\_costs into a numeric variable.

​

Hint: don't forget you cannot change a factor in a numeric variable directly!

​

​

**Assignment 1**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#Assignment-1)

**Data**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#Data)

Please read in "Medicaid.csv" and check the structure.

If needed change the variables Recipients and Total\_costs into a numeric variable.

Hint: don't forget you cannot change a factor in a numeric variable directly!

In [16]:



med1 <- read.csv2("../Documents/Medicaid.csv")

​

mutate(Year= as.numeric(as.character(Year)))

mutate(Recipients= as.numeric(as.character(Recipients)))

​

str(med1)

Warning message in file(file, "rt"):

"cannot open file '../Documents/Medicaid.csv': No such file or directory"

Error in file(file, "rt"): cannot open the connection

Traceback:

1. read.csv2("../Documents/Medicaid.csv")

2. read.table(file = file, header = header, sep = sep, quote = quote,

. dec = dec, fill = fill, comment.char = comment.char, ...)

3. file(file, "rt")

. . .

In [ ]:



​

. . .



​

​

## New variable

​

You will now have to make a new variable called "Cost\_per\_Recipient" by dividing the variable "Total\_Costs" by the variable "Recipients". You will have to use the "pipe-operator". You have to show the "head" of the dataframe.

**New variable**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#New-variable)

You will now have to make a new variable called "Cost\_per\_Recipient" by dividing the variable "Total\_Costs" by the variable "Recipients". You will have to use the "pipe-operator". You have to show the "head" of the dataframe.

In [17]:



Cost\_per\_Recipient<- Medicaid$Total\_Costs/Medicaid$Recipients %>%

head(Cost\_per\_Recipient)

Error in eval(expr, envir, enclos): object 'Medicaid' not found

Traceback:

. . .



## Plot 1

​

Now you have to make a line plot of the data:

​

\* with Year on the x-axis

\* Cost\_per\_Recipient on the y-axis

\* The line should have size 3 and the color "red"

\* The name on the Y axis should be "Cost per enrollee"

​

​

​

**Plot 1**[**¶**](https://russet.uvt.nl/user/u826099/notebooks/exam_2_student2.0.ipynb#Plot-1)

Now you have to make a line plot of the data:

* with Year on the x-axis
* Cost\_per\_Recipient on the y-axis
* The line should have size 3 and the color "red"
* The name on the Y axis should be "Cost per enrollee"

In [18]:



ggplot() + geom\_line(aes(x= Year, y= Recipients, ylab= "Cost per enrollee" col= 'Red', size=3 ), data= Medicaid)

​

Error in parse(text = x, srcfile = src): <text>:1:77: unexpected symbol

1: ggplot() + geom\_line(aes(x= Year, y= Recipients, ylab= "Cost per enrollee" col

^

Traceback:

. . .



End of notebook

End of notebook



Dear Mr. Boone,

​

I have send a lot of questions to you and your colleagues about the R part of the exam. First my R kernel did not work in python, after that I send you a message on github and it took a lot of time untill i got the final answer that I needed to use russet. So, I wanted to start in russet but again this did not work. Loading the tidyverse, which was my very first problem worked after you told the IT. But then I could not load the data (Medicaid.csv) into this file. After that I had very little time to start the R assignment. So, I just made the assignment, without the data(Medicaid.csv). I hope you understand my problem and I hope you could see that I put effort in this assignment and that I would have finished it if the data worked. Maybe you could load the data for me because I tried everything first to let the kernel work and after that everyting you and you colleagues said.

Dear Mr. Boone,

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In [ ]:

