

Week_2_practical

August 21, 2018

© Copyright 2016 Dr Marta Milo and Dr Mike Croucher, University of Sheffield.

1 Week 2 Practical

This Notebook contains practical assignments for Week 2.

It contains guidance on how to perform some basic plotting and implement some basic statistics in R. It also contains practical tasks that you will have to implement yourself. The data we will use is stored within R if not it will be provided in the folder Week 2.

You are free to base your work on the examples given here but you are also welcome to use different methods if you prefer, adding and/or creating new ways of displaying the data. You will need to add descriptions of what you have done in the assigned tasks and a comment on the results obtained using Markdown cells.

You will need to create a new notebook in the Week 2 folder of your SageMathCloud account that you will call your username_week2.ipynb. The notebooks will be self-marked following a set of guidelines that you will receive with a notebook that contains the solutions to the exercises. THIS is FORMATIVE feedback that you can use to improve your coding skills.

The last version of your notebook saved by the deadlines indicated on the module website will be the one that will be considered for self-marking. It will be moved in your assignment folder where you will find the guidelines and the solved notebook.

All the notebooks are meant to be used interactively. All the code needs to be written into *code* cells -- that can be executed by an R kernel. The outputs are not present in this notebook, but the code cells are executable.

Reminder: You can access each code cell for editing by clicking into it and pressing SHIFT and ENTER simultaneously to execute the code. You can run all code cells at once by clicking on *Cell* in the above menu bar and choose Run All.

1.1 Accessing the data

For this practical we will mainly be using the data sets that are provided within R. This is because the Week 2 practical is intended to provide guidance on how to use some basic commands for statistics and for plotting. You are free to use other appropriate data of your own work or that you have uploaded into your R workspace. If you do so you **MUST** describe the data set using a markdown cell and comment.

To see which data sets are stored in R, you can use the command `data()`.

```
In [1]: data()
```