



Software Carpentry 14-17 April, 2020

Day 1

Code of Conduct

Participants are expected to follow our code of conduct:

https://docs.carpentries.org/topic_folders/policies/code-of-conduct.html

License

All content is publicly available under the Creative Commons Attribution License:

<https://creativecommons.org/licenses/by/4.0/>

This Document:

<https://tinyurl.com/ea-2020-1>

Master Document:

<https://edu.nl/tcyt9>

Workshop website:

<https://escience-academy.github.io/2020-04-14-SWC-online/>

Instructors:

Faruk Diblen

Helpers:

Evert Rol, Heather Andrews Mancilla, Nicolas Dintzner, Brett Oliver, Johan Hidding

Roll Call:

name / affiliation / pronouns (optional) / contact, social media etc. (eg. twitter)

- Faruk Diblen / eScienceCenter / he,him,his / f.diblen@esciencecenter.nl / [LinkedIn](#) / T:[@fdiblen](#) / Github: [fdiblen](#)
- Nicolas Dintzner / Delft University of Technology / data steward, software engineering / email: N.J.R.Dintzner@tudelft.nl
- Mateusz Kuzak / the Netherlands eScience Center / he, him / t: [@matkuzak](#)
- Victor Bernal / University of Groningen / PhD student / email: v.a.bernal.arzola@rug.nl
- Banafsheh Abdollahi / TU Delft/ PhD student/ b.abdollahi@tudelft.nl
- Terezinha Souza / Maastricht University /Post-doc / t.souza@maastrichtuniversity.nl /[LinkedIn](#)
- Marco Dal Molin / EAWAG, Zurich (CH) / PhD student / marco.dalmolin@eawag.ch
- Bruna Vieira / Radboudumc / data steward / bruna.dossantosvieira@radboudumc.nl
- Elisabeth Heijmans/ Leiden University/ Post-doc/ e.a.r.heijmans@hum.leidenuniv.nl
- Pablo Rodríguez-Sánchez / eScienceCenter / t: [@DonMostrenco](#) / pabrod.github.io
- Heather Andrews / TU Delft / data steward, data scientist / h.e.andrewsmancilla@tudelft.nl
- Johan Hidding / Netherlands eScience Center / he, him / t: [@jhidding](#) gh:jhidding
- [helper] Evert Rol / Netherlands eScience Center / e.rol@esciencecenter.nl
- Brett Olivier / AIMMS, VU Amsterdam / b.g.olivier@vu.nl / t: [@brett_olivier](#)

Agenda: [Schedule on the workshop website](#) 🧑

09:00 Welcome, coffee, tea, testing setup and pre-workshop survey

09:30 Automating tasks with the Unix shell

11:00 Morning break

11:30 Automating tasks with the Unix shell (continued)

12:30 Wrap-up

Contents:

[Command history](#) (experimental)

Link to the files:

[data-shell.zip](#)

Exercise 1.

list the files and folders in `./data-shell/data` according to the time/date they were last used

Alessia: amino-acids.txt is the last > `ls -c -l`

bruna: `ls -t`

Banafsheh : `ls -halt`

Julien: `ls -S -t` or `ls -halt`

Terezinha: `ls - t -l`

Michela: `ls -lt`

Exercise 2.

What command will you use to print out the number of lines in each file in the `data-shell/data` directory? Create a new file `lines.txt` that will contain the line numbers per each file.

bruna: `wc -l *.txt >lines.txt`

Banafsheh : `wc -l *.txt > n-line.txt`

Alessia: `wc -l *.txt > lines.txt`

baharak: `wc *.txt>info.txt`

Marco: `wc *.txt > file`

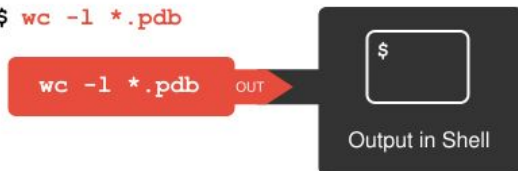
Michela `wc -l *.txt > ex2.txt`

Hossein: `wc -l *.txt`

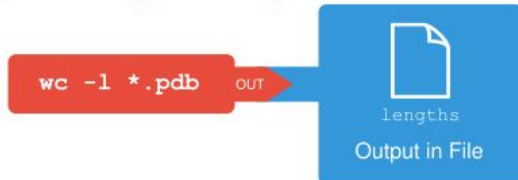
Terezinha `wc -l *.txt | sort -r`

Pipes and redirections:

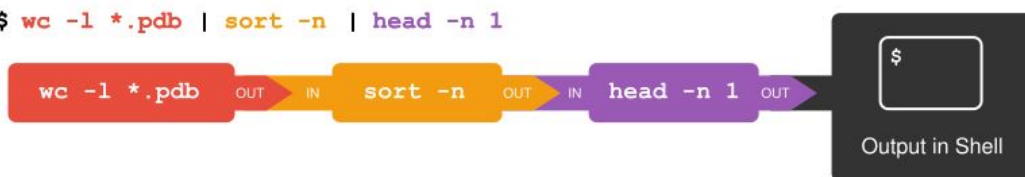
```
$ wc -l *.pdb
```



```
$ wc -l *.pdb > lengths
```



```
$ wc -l *.pdb | sort -n | head -n 1
```



Exercise

Exercise

Exercise

Feedback

Good: That was useful and thank you for your time.

Good: Well organized material

To improve: pace is slightly slow

Good: better than expected online setting, sufficiently interactive

Good: there is a good interaction with the different exercises

Good: nice to have some exercises. It might be also nice to give some homework

Good: the pace for me was perfect! It was very useful that Faruk was verbally communicating the commands while writing them

Suggestions: - more structured instruction sessions, - explain the dataset at the beginning of the session, - ctrl+C to quit the instruction on the shell it is a useful thing to learn at the beginning ;-)

Good: good pace I didn't think it was too slow. Clear voice and explanation.

Suggestions:

-scroll down/up in the command line, so that the command you are typing appears higher in the shared screen, since sometimes Zoom buttons cover the lower part of the shared screen.

-easier/simpler instructions for posting a question/suggestion during class (e.g. just post a question in the chat) instead of raising hand + adding to google doc, etc

- buy a microphone (I thought that the voice sounded a bit metallic, but it might also because of the quality of the speaker on my laptop)

-would it be possible to make available in the document a few examples of the scripts?

Very informative and well explained, although I was already familiar with most commands introduced during this first session. The consequence of it is that the pace appeared very slow to me. However, I don't think this is something you should change since some people are really new to it, and it takes time to understand and learn shell.