

---

## 1 Exercise: Basic Git commands

1. First you need do install Git and configure it.
2. Then you can download an example repository:

```
git clone https://git.rwth-aachen.de/tim.jammer/hkhlr-git-intro-demo.git
```
3. The repository contains some L<sup>A</sup>T<sub>E</sub>X files for a Git cheat sheet. You can build the PDF file with the Makefile<sup>1</sup>. You can refer the Readme for further information on the Repositories content.
4. When inspecting the documents you might have already spotted the spelling error in the copyright notice at the end. This part is contained in the `footer.tex` file.
5. Can you use Git commands to find out who is to blame for this error? Which commands do you need?
6. Can you use Git commands to find out when this error was introduced? Which commands do you need?
7. Now make a new commit *locally* that is fixing the spelling error.
8. How could you theoretically make your new version available to all other participants?<sup>2</sup>

## 2 Exercise: Merging Branches

1. Which command is needed to switch to another branch? Now switch to branch `merge_1`.
2. There is another branch called `merge_2` Merge it with `merge_1`. You should see a merge conflict occurring.
3. You can see that a merge conflict appears. Why is this a conflict? Is there a way to prevent such conflicts? How did you fix the conflict?
4. Switch to the `master` branch again.
5. Now merge `merge_3` into `master`. Why is there no merge conflict this time, although both branches include changes to the `footer.tex` file?

---

<sup>1</sup>A Makefile might not work on windows systems, an introduction into Makefiles is also part of our ProTHPC course program

<sup>2</sup>Note that the Server will not accept a contribution from you and the command asked for will fail