

Scientific Programming (Wissenschaftliches Programmieren)

Exercise 1

Preparation

- Make sure you have a working Unix installation (either natively, e.g. if you are using Linux or MacOS or had activated Windows Subsystem for Linux on Windows), or by installing Lubuntu 22.04 in VirtualBox.

Archive handling (1)

- Download the [exercise archive](#) into your HOME-directory. (If you save it in your browser, you will probably find it in the ~/Downloads folder. Move it then to your HOME directory.)
- Extract the content of the archive.

File manipulation

- Change into the directory `exercise1/dir1`.
- Delete all files ending with the character tilde (~).
- Go up one directory.
- Delete the directory `baddir` and its content.
- Create the directories `dir2` and `dir3`.
- Copy all files from the directory `dir1` into `dir2` which contain an even (3-digit) number in their name.
- Move all files from the directory `dir1` into `dir3` which contain an odd (3-digit) number in their name, but only if the number is less than 500.
- Change the attributes of the files in `dir3` to make sure, that only the owner can read or write those files.
- Change the attributes of the directory `dir3` to make sure, that only the owner can enter into that directory.

Archive handling (2)

- Make a compressed file archive named `exercise01-solution.tar.xz` from the current status of the `exercise01` folder.

Manual

- Look up in the manual, how you can prevent the `ls` command to colorize the results. (Search for the word “color” in the manual).
- Try out on the command line, whether you can get a non-colored list of files and directories, when listing the content of your HOME-directory.

Setting up initialisation

- Open your `~/ .bashrc` file add add aliases to make sure, that the commands `rm`, `mv` and `cp` are always invoked with the interactive option. (If you use a shell other than the BASH-shell, adapt the exercise accordingly.)