

FYD500 - Homework I

The first number of assignments for FYD500, an introduction to linux.

Exercise 1

Start a terminal and type the following command:

- `echo "This is the best course in the world!"`

This will print the text within the quotes ie.

>This is the best course in the world!

While typing, try the following:

- `Ctrl+A` - *Moves the cursor to the beginning*
- `Ctrl+D` - *Exits the program*
- `Ctrl+E` - *Moves the cursor to the end of the line.*
- `Ctrl+L` - *Clears the screen*

What is the difference between clear and `Ctrl+L`?

>None from what I can gather

Exercise 2 - RTFM

Print the day that you were born:

- `date --date='TZ=Europe/Stockholm 19880610' - It was a Friday.`
- `cal -y 1752 - 30 days in September`

Simple file manipulation

The following command will create the file `bestcourse` or overwrite existing file. It will add the text within the quotes to the file.

echo "This is the best course in the world" > bestcourse

`pwd`, stands for print working directory. This will most likely be `~/` or `/home/$USER/mycourse` if the `cd` command hasn't been used.

To move files, one uses `mv`, see the solution below for syntax. Just swap `cp` for `mv`.

To copy the file we created before, one would use `cp ~/mycourse/bestcourse ~/mycourse/verybestcourse`

Exercise 4 - System information

- 1) `whoami` - *I'm batman, or in my case backefel*
- 2) `w` - *Prints other users*

- 3) `w | awk 'FNR==3 {print $4}'` - *How long the system has been idling. \$<n> is column and FNR==<n> is row*
- 4) `uname -r` - *Displays linux revision - in my case 5.0.4-arch1-1-ARCH*

Exercise 5 - Downloading archives

- 1) `wget https://www.chalmers.se/en/departments/physics/research/cmt/tassin/Documents/assignment1.tar`
- 2) `tar -xvf assignment1.tar`
- 3) `tree -d ./assignment1`

Exercise 6 - Slightly less simple file manipulation

Downloaded the file with `wget <link>`

The command `cat` will print the contents while `grep` filters out the relevant rows.
I.e. the command is:

`cat loremipsum | grep "Nunc euismod"`

To print the last 11 lines, type `tail -11 ./loremipsum`

To print only the files in the directory, one can use `grep -v` which inverts matches.
So the following code lists recursively all the files and folders. The output is piped to `grep` which looks for things not containing `/`.

`ls -R | grep -v /`