

## Exercise 1

Create a directory “week01” in home directory.

- `mkdir ~/week01`
- `cd ~/week01`

List last 5 entries in `/usr/bin` that contain “`gcc`” in reverse alphabetical order. Save results in

- “`~/week01/ex1.txt`”.

**Note:** you should submit the file *ex1.txt* and the script *ex1.sh* which contains the commands you’ve run for this exercise.

## Exercise 2

Try some commands and save command history to “~/week01/ex2.txt”. Store the commands in a script *ex2.sh*

**Note:** you should submit the file *ex2.txt*, and the script *ex2.sh*.

**Hints:** use *history* command for getting the list of commands executed recently.

## Exercise 3

Write a shell script **ex3.sh** that creates two files (*root.txt*, *home.txt*) inside two separate new folders. Before creating the next item (file or folder), print the date and wait for 3 seconds.

The file *root.txt* contains the items of the root directory '/', whereas the file *home.txt* contains the items of the home directory '~'. The items of both directories should be sorted by time (oldest first). Print the content of files and display items of your new folders.

**Note:** you should submit the files *root.txt* and *home.txt*, and the script **ex3.sh**.

**Hints:** use the command **date** for getting the current date, and **sleep x** command for pausing the execution x seconds. Run the script with:  
**bash ex3.sh.**

## Exercise 4

Write “Hello world” in the C language. Create source file:

`gedit ~ /week01/main.c`

Write program:

```
1 #include <stdio.h>
2 int main(void)
3 {
4     printf("Hello World!");
5 }
```

Compile the program, where `ex4` is name of executable file:

- `gcc main.c -o ex4`

Run the program with:

- `./ex4`

**Note:** you should submit the files `main.c` and `ex4`.