

Programming Techniques for Scientific Simulations

Exercise 0

There is nothing to be handed in.

This file shall give you an overview what has been done during the exercise class on Sept 19th. If you have been absent, you are encouraged to work through that.

Problem 0.1 Account for D-PHYS workstations

If you want to use the workstations, create an D-PHYS account. For that, follow the link on the lecture webpage http://www.itp.phys.ethz.ch/education/lectures_hs12/programming_techniques.

If you want to use your own computer, make sure you have installed a `SVN` repository in order to be able conveniently to get the solutions and files to be worked with. Further you should install `cmake` for building.

Problem 0.2 Unix-shell tutorial

Work through the shell-tutorial provided in the supplementary material on the lecture website.

(Skip the last part asking to sort Shakespeare words by frequency.)

Problem 0.3 Set up the repository

As the solution will be provided via `SVN` repository at <https://alps.ethz.ch/lectures/pt> (read-only account: `lectures:hs12`) the most convenient way to get them is to set up a workcopy of the repository on your local machine. To do that make a directory a move into that

```
mkdir prog_tec  
cd prog_tec
```

a afterwards make the workcopy there

```
svn co --username lectures https://alps.ethz.ch/lectures/pt
```

Problem 0.4 Compilation

As next try to compile the `hello.cpp` in directory `week1` in the repository by

```
c++ -o hello hello.cpp
```

Further you shall use `cmake` to compile all other programs

```
cmake .  
make
```

Note that the `cmake` will produce a `Makefile`. The `swap.cpp` is not compilable and after the 1st lecture you should already know why.

Alternatively you may take a look into the `Makefile_simple`. If you want to use that for compilation, just rename it to `Makefile`.