

Homework. 1: Intro to terminal and C++

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A Using the terminal

To do this homework you will need to download the files from e-Campus. All the needed files are in folder `data`. This exercise focuses on using the terminal efficiently.

Every question in this exercise must be answered with a command on a single line. You should save each of these lines into the file `homework_1/task_1/commands.sh`.

Once you have forked <https://gitlab.igg.uni-bonn.de/teaching/cpp-homeworks-2018> make sure to copy `data` folder into `task_1` folder along with `commands.sh`. Make sure all commands run from within `homework_1/task_1/` folder correctly.

1. (1 points) Count how many lines are there in “`data.dat`”.
2. (1 points) Count how many lines of those contain “`dolor`” or “`dalor`”?
3. (1 points) Count how many words are there in “`data.dat`”?
4. (1 points) Count how many of those start with “`mo1`”?
5. (1 points) Count how many files in “`test_folder`” are “`.txt`” files?

Hint: you might want to use `wc` command.

B First C++ program

6. (5 points) In this exercise you will write a small “guessing” game. The program will pick a random number from 0 to 99 and you will be guessing this number by providing your guess through `stdin`. Depending on which number you have guessed there are 3 outcomes:
 - You have guessed the number. Then the program has to tell you that you have won.
 - Your number is larger than the target one. The program should tell you that its number is smaller.
 - Your number is smaller than the target one. The program should tell you that its number is larger.

The game goes on until you have guessed the number.

Make sure to save your `cpp` file in `homework_1/task_2/guessing_game.cpp`

Tip: To generate a random number you can use `rand` function to keep things simple:

<http://en.cppreference.com/w/cpp/numeric/random/rand>