Course C^{++}, Exercise 1

Deadline: 07.03.2017

1. Type `which g++` to find out in which directory the C^{++} compiler is situated.

   Change the current directory to this directory. Show that you are able to type `ls -t`, `ls -l`, `ls -lh`, `ls -l | more`, `ls -lt | less` and understand what they do.

2. In your home directory, create a directory `hello`, and show that you are able to find it. In this directory, create a file `hello.cpp` with the following contents:

   ```cpp
   #include <iostream>

   int main( int argc, char* argv [ ] )
   {
      std::cout << "hello world!\n";
      return 0;
   }
   ```

3. Create a Makefile for compiling the previous program. Use the make command to compile it. (See `http://www.drpaulcarter.com/cs/make.php`) There is an example on the course homepage. In order to test the Makefile, type

   ```
   touch hello.cpp
   make               // Program is compiled
   make               // Program is not compiled a second time.
   ./hello            // Program is executed.
   ```

4. Make a copy of the previous program, which must be called `hello2.cpp`. Modify it into

   ```cpp
   #include <iostream>
   #include <string>
   ```

```
int main( int argc, char* argv [ ] )
{
   std::cout << "what is your name? \n";
   std::string name;
   std::cin >> name;
   std::cout << "hello, " << name << "!\n";
   return 0;
}
```

Compile it, using **make**.