



1 Lab 1: “Hello, World!” on the PC

1.1 Summary

This lab introduces the very basics of C programming. You will learn how to write a valid example program in C, how to compile it and how to execute it. Thereby, this lab introduces the command line interface (CLI) and one possible C development toolchain as commonly used on general purpose computers.

1.2 Objectives

By the end of the lesson, you shall have written, compiled and executed a C program which prints the text “Hello, World!” on the screen.

1.3 Duration and evaluation

One lab of 80 minutes. You have to present the working “Hello, World!” program to the supervisors until the end of the lesson.

1.4 Recommended reading

C Tutorial ¹: provides a comprehensive C tutorial. Familiarizing yourself with the first sections helps in following the instructions during the lab.

GCC ²: explains the command line options of gcc, the compiler used for this lab.

¹<http://www.tutorialspoint.com/cprogramming/index.htm>

²<https://gcc.gnu.org/onlinedocs/gcc-4.8.5/gcc/Invoking-GCC.html>



2 Task1: Write a “Hello, World!” program

2.1 Required preparation

You need to bring your own device (e.g. laptop) with a working installation of the gcc compiler and the C standard library.

2.2 Source Code and CLI instructions

```
1 | #include <stdio.h>
2 |
3 | int main()
4 | {
5 |     /* Prints a simple text message. */
6 |     printf("Hello, Wold!\n")
7 |
8 |     return 0;
9 | }
```