## Programming Languages 1 Lesson 9

2<sup>nd</sup> Test: 18. May (for the Monday groups) 2<sup>nd</sup> Test: 22. May (for the Friday group) (Retake test: 28. May 14:00-16:00 for both groups)

## **Exercises:**

- 1. Write a C program that can add entries to a phone book. The phone book is stored in a file named phonebook.txt. Use a structure to store the read data before you write it to the file. The first- and lastnames are 49 chars long max. The fields of data are separated by space characters in the file.
  - 1. Learn the basics of structures (also mention union).
  - 2. Create the structure to hold the data of one person (first name, last name, phone number)
  - 3. Write the program. Put the write out of the data into a function.
- 2. Add an extra function to your code that can search phone numbers by lastname. Change the main program so that it asks what you want to do and you can chose if you want to add a new entry or search for a number.
  - 1. Change the main function. (switch statement)
  - 2. Learn where to find the basic string functions (strcmp(), strcpy(), strchr())
  - 3. Write the search function.
- 3. **Homework**: Add extra functions to your program. Make it able to search by firstname, or by phone number, or by first- AND lastname.

