

Introduction to Programming – Concepts and Tools

Carsten Butz
IT University of Copenhagen

Week 5

Today's Goals

- Feedback on last week
- Reminder of last week
- Where you should be by today
- Lecture
 - Analysis of algorithms
 - Sorting: selection sort, quick sort

Last week: Arrays, Sorting

- Concept:
 - List of fixed length
 - Distinction between the pointer (reference), and the actual array.
- Initialisation
- Naive array assignment = pointer assignment
- Call by value – call by reference
- Command line user input
- Two dimensional arrays (an array of pointers)
- Searching: linear search, binary search

Where you should be

- Theory
 - Read chapters up to (and including) chapter 5
 - Understand pointers and their use
 - Understand the difference between call by value, call by reference
 - Understand basic search techniques
- Praxis
 - Use arrays in your programs to hold large amount of homogeneous data
 - Operate on arrays
 - Use methods to structure your code
 - Completed assignment 4