

Introduction to Programming – Concepts and Tools

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Week 4

Today's Goals

- Reminder of last week
- Where you should be by today
- Marking scheme
- Student misconduct
- Lecture
 - Arrays
 - Searching: linear search, binary search

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Last week: Methods

- Syntax
- Invocation, call-by-value
- Method overloading
- Scope of variables
- Recursion
 - Towers of Hanoi
- Top-down approach to programming

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Where you should be

- Theory
 - Read chapters up to (and including) chapter 4
 - Understand the need for structured approach to programming
 - Understand the difference between recursion and iteration
- Praxis
 - Write methods to structure your code
 - Use top-down approach to design programs
 - Completed assignment 3

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Learning How To Program

Learning how to program has much in common with learning a new (natural) language:

- you only have limited vocabulary available;
- you have to express yourself with the available vocabulary;
- you often learn from examples, from watching others;
- experienced people tell you what is correct syntax and what is not;
- experienced people tell you what is good style and what is not;
- given a task,
 - your are sometimes free to choose the way to solve it,
 - but sometimes this is given to you;
- you may say something, but you do not get the expected

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