Compilers – The Sequel

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uct csc3003s 2008

Outline

- Lectures
  - Monday - Friday
  - 3 weeks

- Tests
  - 27 August (probably 2/3 of Compilers)
  - 1 October (maybe last 1/3 of Compilers)

- Assignments
  - Assignment 1: due 22 August
  - Assignment 2: due 29 August
  - Assignment 3: due 12 September

Refresher

- What is a compiler?
  - "A compiler's primary function is to compile, organize the compilation, and go right back to compiling. It compiles basically only those things that require to be compiled, ignoring things that should not be compiled. The main way a compiler compiles, is to compile the things to be compiled until the compilation is complete."

Refresher-in-one-slide

☐ How does a compiler work?

    ☑ Lexical analysis – divide program into symbols

    ☑ Parsing – create tree form of program

    ☐ Check data types

    ☐ Determine variables in each section

    ☐ Transform code to fictitious (IR) machine code

    ☐ Optimise IR code

    ☐ Transform IR code to real machine code

    ☐ Optimise register usage