Lecture 02 Notes

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Part 1 (11 - 11:40)

Memory Concepts, Variables, Representation

- When you declare a variable, it is assigned a location in memory. All references to store or access the named variable are translated by the C compiler using a lookup table.
- The datatype is how pattern of bits in memory are stored and interpreted to mean a number, a character, etc.
- Int32 representation (http://en.wikipedia.org/wiki/Integer_%28computer_science%29)
- Debug → QuickWatch
- Debug → Windows → Memory
- Representation of integer 1 vs. -1

Arithmetic and Precedence

- Rules of precedence
- Integer division vs. real division
- Modulus operator

Relational Comparisons, and the bool type

- Making decisions, we need be able to perform alternative actions based on making some sort of decision.
- bool should be used instead of an int for boolean flags in a program in modern c.

Part 2 (11:45 - 12:30)

Algorithm

An algorithm is a series of unambiguous explicit steps that can be taken to solve a problem. An algorithm is a procedure for solving a problem in terms of

1. the actions to execute and
2. the order in which the actions execute