ICS3U: Final Examination Outline

The final examination is on Thursday, January 26 at 9:00, in room 310. It is a 90 minute written exam, drawing upon the entire course. Computers, calculators and class notes are not permitted.

The exam is broken down into four sections, for a total of 65 marks.

Short Answer
Fill-in-the-blank questions covering a variety of topics discussed during the course. Definitions of computer hardware, data types, brief mathematical calculations, loops and indexing are all covered.

Longer Answer
Full solution questions, requiring brief written explanations or calculations. Non-programming topics (environmental issues, career skills), data representation, and general concepts regarding algorithm and program design are in this section.

Program Design
A variety of questions dealing with the design of algorithms and computer programs. Flowcharts, rewriting existing code using alternate commands, and writing short code snippets to complete simple tasks are all represented in this section.

Code Analysis
Questions focusing on program execution and correctness. Using trace tables, interpreting code, and correcting syntax, run-time and logical errors are all covered.

Throughout the exam, you will use your knowledge of the following concepts covered in class:

1. Mathematical operators (+, -, *, /, //, %, **)
2. Order of Operations (BEDMAS)
3. Basic Input/Output (input, print)
4. Fundamental Data Types (integers, floating point values, strings)
5. Comparison Operators (==, >=, <=, >, <)
6. Boolean Operators (and, or, not)
7. Conditional Execution (if, elif, else)
8. Repetition (for, while loops)
9. Functions (function definitions, function calls, arguments, return values)
10. Common string functions (count, upper, lower, isupper, islower, isalpha, isdigit, find)
11. Lists and common list functions (len, sum, append, insert, remove, del, index, sort)

GOOD LUCK!