CS0007: Mid-Term Review

Key Terms: CPU, main memory, memory address, bit, input, output, user, end user, algorithm, prevention, validation, documentation (internal and external), platform-specific, source code, compiler (compilation), Java Byte Code, JVM, algorithm, syntax error, logical error, run-time error, procedural programming, object-oriented programming, object, class, attribute, method, encapsulation, data hiding, keyword, identifier, Java API, variable, data type, assignment, literal, primitive data type, string, string concatenation, integer number, floating-point number, initialization, operators, arithmetic operators, operands, modulus, type cast, widening conversion, narrowing conversion, named constant, reference variable, scope, comment, programming style, sequence structure, decision structure, relational operator, logical operator, flag, nesting, looping structure (loop), infinite loop, pretest, posttest, conditionally-controlled loop, count-controlled loop, accumulator variable, sentinel value, array, element, index (subscript), data structure

Classes: `System, Math, Random, DecimalFormat`

General Concepts:
- The Program Development Cycle
- Procedural Programming vs. Object-Oriented Programming
- Characteristics of variables
- The different decision and looping structures (how are they different, etc.)
- The array searching and sorting algorithms we discussed

Specific Programming Concepts:
- Simple variables
- Arrays
- `if` Statements
- `while` Loops
- `for` Loops
- Arithmetic Operators
- Logical and Relational Operators

Note: There is no guarantee that all of the material on this document will be on the mid-term exam. Also, there is no guarantee that everything on the mid-term exam is on this document.