

CSCI 161 – Midterm Exam #2 Review

General Notes for Midterm Examination:

- **No** multiple-choice **or** fill-in-the-blank
- Short answer and coding questions
- Partial credit awarded
- Three pages

Material [Everything from the first test PLUS...]

- String – representing text in a program
 - Concatenation, declaration, etc.
 - Methods/operations
 - names given on test – know how to use
 - need to know arguments and return type
 - Building strings (using +)
- Scanner
 - Reading lines vs. strings vs. int vs. double
 - Basic user input
 - hasNext/hasNextLine/hasNextInt
- Conditionals
 - The if-statement
 - The else clause
 - Combinations of if/else if/else
 - And when we use them
 - Boolean expressions
 - Boolean Operators (and/or/not)
 - Comparison operators (>, <, ==, !=, <=, >=)
 - Assignment to boolean variables
 - Evaluation and simplification (DeMorgan's Law)
- Loops
 - While/Do-While/For
 - When to use each type of loop (and why)
 - Sentinels
- Random Numbers
 - The Random class
 - Creating random integers in a range
- File Input
 - Creating a File object
 - Using File with Scanner
 - Exceptions

You will be writing code on this exam.