

General Grading Criteria for Java Programs

1. Programs must compile and run error-free
2. Programs must meet all program specifications
3. Source code formatting
 - a. Use of blank lines to increase readability
 - b. Proper use of indentation to delineate blocks of code
 - c. Indenting to include lining up { and its matching } vertically.
 - d. If multiple levels of nesting, comment the closing } as to what block it is closing
 - e. Type lines to avoid having to scroll horizontally to see a line of code
4. Conventions for capitalization
 - a. Constants: all capitals, example: TAXRATE
 - b. Classes: first letter capitalized, example: Wages
 - c. Variables: first letter small, first letter of each embedded word capitalized, example: hoursWorked
5. Naming
 - a. Methods: usually verbs, indicates what method does
 - b. Variables: descriptive of purpose
 - c. Objects: usually nouns, descriptive of what it is
 - d. Name of program/main method: (where N is the program number)
`FirstnameLastnameProgramN.java`
 - e. Avoid using the same identifier (i.e. name) for variables in different scopes
6. Comments
 - a. Beginning of source file: student name, program number, program description, date
 - b. Throughout: comments describing variables, blocks of code, behavior of methods
7. Programming
 - a. Proper choice of data type for all variables and constants
 - b. Descriptive output that would make sense to a user of the program who has no knowledge of how the program works:
 - i. Echo data input
 - ii. Label all data output
 - iii. Output currency values preceded with a \$
 - c. Prompt user for all input and where appropriate indicate valid possible responses
 - d. Validate all input values appropriate for the data type