

## Good programming practices

The following are considered good programming practices. *All homeworks must include these whenever possible.* Not including them will receive points off from the grade.

- Header: The comments at the beginning of the file, and need to include your name, e-mail ID, section, and a line or two about what this program does.
- Comments: A line or two before each major "block" (section of code, class, method, variable, etc.) describing what it does.
- Whitespace: A line or two between separate elements of the code (methods, code segments, etc.) and good indentation.
- Legend: The program should print out a line or two that states what the purpose of the program is (i.e. "This is a ABC", or "This program computes XYZ"). This should be the first line(s) printed.
- Echoing input: All user input should be echoed back to the screen. This can be a line saying "you entered 5" after the user enters each input, but can also be a line saying, "The product of the two numbers you entered, 5 and 7, is 35".
- Variable names: All `final` variables should be in all caps with underscores between the words, such as `BOX_WIDTH`. Non-`final` variable names should have the `firstLetterOfEachWordCapitized` in the variable name (excepting the very first letter). Variable names should be relevant and informative, such as `mileage` and not `m`.
- Test code: ALL programs must include proof that you tested the program. For this program, the test is just required as comments - enter what values you used to test your program, and what the output is. Just inputting random values will not get you any points here - you need to think about what sort of values will sufficiently test your program, as well as what values you can hand-check to make sure the program works as desired.

## Grading

The following lists the criteria that the graders will be look at when the homework is graded. Note that these criteria will not be provided on the other homeworks,

only on this first one. Also, the points for each of the following criteria have not yet been determined.

- Program header (includes name, e-mail ID, and purpose)
- Good commenting and use of whitespace
- Print out an appropriate legend
- Proper use of Scanner for the input stream
- Properly prompts user for input
- Input is echoed to the screen
- Properly computes the necessary values
- Prints out the necessary values
- Variable declaration (good names, proper initialization, etc.)
- Testing cases shown in comments