**CSE 174 – Spring 2019**

**PROGRAM #2: 30 points – Due Sunday, Feb 10, by 11:59 p.m.**

**Outcomes:**

* Use a contemporary programming language and programming environment.
* Write, compile, edit, and debug simple Java programs.
* Write Java programs that use primitive numeric data types and calculations.
* Format and comment source code that adheres to a given set of formatting guidelines.
* Use a zip compression tool to combine multiple files.

**Scoring:**

At a bare minimum, the program you submit must have the assigned source code, and your source code must compile and run without crashing.

* If you do not submit your source code (.java files), your score will be zero.
* If you submit source code that does not compile, your score will be zero.
* If you submit source code that roughly resembles the requirements and it compiles, but it crashes under normal operating conditions (nice input from the user), your score will be reduced by 75%.

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|  | **Full credit** | **No credit or Partial credit** |
| **Write solutions to the four given problems (20 points)** | The programs you submitted solved the specified problems. | The programs you submitted do not solve or only partially solve the specified problems. |
| **Format and comment source code (5 points)** | You followed all formatting guidelines (indentation, comments, escape sequences, upper/lowercase, etc.). | You did not follow some or all the formatting guidelines. |
| **Follow technical specifications (5 points)** | Your class names, filenames, and zip folder meet all specifications | You did not meet one or more of the required specifications |

**Getting started:**

* Google has posted an excellent collection of style guidelines, for a variety of languages. Visit the page http://www.oracle.com/technetwork/java/codeconventions-150003.pdf or https://google.github.io/styleguide/javaguide.html. In this and future assignments, you are expected to follow the guidelines in these documents.
* For this assignment, you will be submitting a "zip" file containing all of your work. If you are unfamiliar with creating zip files, you should find a tutorial online for creating zip files for your platform (Mac, Windows, Linux, etc.)

**Requirements: You will write four separate Java programs**

1. Create a folder on your computer named program2. All four of your source code files should be created in this folder.
2. (5 points) Write a program that prints the following:

/\\_\_/\

| |

( o o ) ( Hello, )

\ / ( I love )

\ @/ <..( Java )

U (programming.)

1. (5 points) Write a program that prints the following drawing:

+

/ \

/ \

'-+-+-'

| "-" |

| | | |

'''''''

1. (5 points) Write a program that prints a three-column list of your favorite movies. In the first column, print the movie title; in the second column, print its release date; and in the third column, print its main actor/actress.
2. (5 points) Write a program that prompts the user for a side length and then prints
   1. The area and circumference of a square with that side length
   2. The volume and surface area of a box with that side length
3. (5 points) Verify that your source code meets appropriate style guidelines, including comments (include name, date, section of CSE 174, and description) as well as any other guidelines described in the style guidelines document referenced earlier in this assignment.

5. (5 points) Follow these steps to submit your work:

1. Make sure the program2 folder contains the source code files (.java) for all four of your programs. It is OK if the folder also contains other files.
2. Compress the program2 folder to create a zip file. Name the zip file **program2.zip** (Canvas might rename the file when you upload it. That's OK.)
3. Submit only the zip file to the Canvas website.

Note: If you submit your work and decide to modify one of your programs, you need to resubmit a new zip file containing all four source code files (even if you only modified one of them). **Do not rename your source code files. Do not rename the zip file.** Canvas may add a number to the name of your zip file. That is fine. But you should keep all source code filenames the same as described above.