Program 1: Hello
CS 617 Winter 2013

1 Goals

- To install (if necessary) and use Java and the Eclipse IDE.

- To customize your Eclipse installation to be good for our purposes.

- To modify and run a very simple Java program.

2 Getting Eclipse:

- Create a directory for this class. Call it CS617. Put it somewhere convenient.

- If you do not have Java installed on your machine, you need to do this first.
  Go to: http://www.eclipse.org/downloads/. I believe this will come with the documentation. If not, go to: http://docs.oracle.com/javase/7/docs/

- Go to: http://www.oracle.com/technetwork/java/javase/downloads/index.html.
  Download the Java Platform (JDK) 7 u2 (Leftmost big button on the page).

- After installing Eclipse, you must configure it. Do all of the following.

    - Click on "Preferences", on the Eclipse menu at the upper left.
    - Open the triangle for the General area (first option).
    - Inside that, click on Text Editors but do not open up the triangle.
    - Make sure the displayed tab width (near top) is set to 4.
    - Click the checkbox (midway down the list) for "Show line numbers"
    - Now click on "Workspace" at the bottom of the General list.
    - Check the "Save automatically before build" box.

  The first time you create a project in Eclipse, you will be asked about what workspace to use. Use the Browse button to navigate to your CS617 folder and select that. Click the checkbox at the left to make it your default workspace location.

3 Starting a new project.

- Open up Eclipse and click "New" on the File menu, then select "Java Project" from the drop-down.

- Give your project a name and click "Finish".

- The Eclipse workbench display will open up. It has many optional windows. I am using the editor window, the Console, ProjectExplorer, Search, and Members. The full list can be seen under the Window menu, Show View option.

- You can open several viewers. They will appear as tabs in a pane at the bottom of the workbench. If you don't like that location, grab one by the tab and drag it somewhere else. I put three of them along the left edge of the main window. If I move the big window, all the little ones move with it.

- When you close Eclipse and open it again, the windows will come up in the places you left them.

4 Winter Work

Once you have created a project, you are ready to add code.

- To create a brand new code file, click File / New / Class, and start typing.
- Often, though, I will ask you to start with some of my code. The easiest and most reliable way to do this is to open up my source file in your text editor (NOT WORD!) Then copy and paste the code into your new class file.
- Another way to do the job is to put my file on your desktop and drag it into the src folder within the desired project. If it won't go inside src, use the File / Move menu to put it there. You must use Eclipse to move it, or the entire project becomes broken.
- Finally, the File menu has an Import option. It should work, but so far I have not succeeded with this method.
- Once the desired code file is inside your src folder, you can click on it to open it in the editor.

Changing the program.

- Make sure the code you downloaded runs on your Java system.
- Change the Javadoc comment at the top.
- Change the program by adding your name to the output.
- Write your own Haiku, if you like.
- Run it again and correct details if it is not neat and attractive.
- Capture the output with your mouse and paste it into a comment at the bottom of the source code file.
- Hand in (electronically, by email to my home address) the source code file, with output in it.