

Exercises:

Java Setup and Warmup

These exercises are mostly to verify that Java and Eclipse are installed properly, and that you know how to create projects and classes and to run simple desktop applications.

1. Open Eclipse and go to the “intro” project. Expand the entry that says “(default package)”. Open the the HelloWorld application by double clicking on it. Run it (R-click, Run As --> Java Application) and make sure you can see the output in the Console window. Once in a while you accidentally close the Console window and there is then no “Console” tab at the bottom. To get it back in that rare case, do Window --> Show View --> Console.

Also, if you are on your own PC, remember that you can download all of the Eclipse projects from the Java Programming tutorial at coreservlets.com. The Web site has instructions on how to import into Eclipse. There are projects with the source code from the lectures as well as projects containing the solutions to the exercises.

2. Copy HelloWorld and rename it to Test (R-click, Copy, R-click, Paste. Or, to rename without keeping the old class name, R-click, Refactor --> Rename). Run Test.
3. Make a new Eclipse project called “intro-ex” or something similar. (File --> New --> Project --> Java --> Java Project). Make a new and very simple class called MyClass (R-click project, New --> Class). Give it a main method (indent two spaces, type the word “main”, hit Control-Space). Add a print statement inside the main method (indent two space, type the word “sysout”, hit Control-Space). Run it
4. Add a package to your project called mypackage (R-click project, New --> package). Add a class with a print statement to the new package. Run it.
5. In the lecture, we made a class whose main method created three variables (an int, a double, and a String) and had three println statements to print their values. Make a new class whose main also creates three variables (int, double, String), but this time use a single println statement to print their values.
6. Make sure you have the Java API (<http://docs.oracle.com/javase/8/docs/api/>) bookmarked in whatever browser you prefer to use. Look in that API for the String class. Find the replaceAll method. Which comes first: the regular expression being searched for, or the replacement string? Now look up the Math class. What is the default base of the log method: 10 or e?