

Lab Exercise #2
Debugging with Eclipse
Computer Science 2334
Due by: Friday, January 30, 2009, 2:00 pm

Name: _____

Learning Objectives (Milestones):

1. Install Eclipse and import an existing project to it.
2. Successfully compile a sample Java program and generate Javadoc documentation for the program using Eclipse.
3. Learn to use Eclipse debugger.

Instructions:

This lab exercise *requires a laptop with an Internet connection*. Once you have completed the exercises in this document, you will submit it for grading. You should legibly write your name at the top of this lab handout.

1. Download the sample “Lab1.zip” source archive from the class website. Save this file to your Desktop. Import the archive into Eclipse using the instructions given in the slides. Once the archive has been imported, you may now delete the “Lab1.zip” from your Desktop.
2. Add the following code to the main method of Lab1.java using Eclipse.

```
Lab1 lab1Program;  
  
lab1Program = new Lab1( "This is the first lab exercise for CS  
2334." );
```

3. Eclipse should highlight several errors that you need to correct in the source code. List these errors in the space provided below with a short explanation of how you fixed them. Be sure to list the line number that the actual error occurred on in the Lab1.java file. Once you have removed all of these errors, the file should not contain any errors or warnings.

List the errors found and give a short explanation of how you fixed each one:

4. Now, try to run the program by right-clicking on “Lab1.java” and select “Run as”. Notice that the option to run as “Java Application” is not present. In order to run the program the source file must contain a `main()` method. Fix this error in the program source code and verify that the program works by trying to run it again.

5. Generate the Javadoc documentation for the `Lab1` program using the instructions given in the slides.

This will create a new sub-folder named “docs” and place several files in the folder including an `index.html` file.

Next, open the `doc\index.html` file using a web browser and inspect it's contents.

Describe the contents of the `index.html` file (**At least 5 sentences to get full credit**).

6. Download the `Lab2.zip` file from the class website. Import them into Eclipse as a project.

7. Run the project by using Eclipse. List the error (or errors) found and give a short explanation of it.

8. Fix the error by changing ONLY the `work()` method in `Lab2.java`. Write down the modified `work()` method.

9. Using Eclipse debugger, what is the value of `myArray[4]` after `work()` is done?