Lab 2 –Debugging

Part 1 Tasks

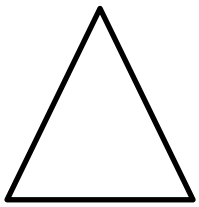
1. Create a working directory named **Lab 2**, this will be a folder on your computer.

2. You must use Notepad++/Sublime and the command line prompt/terminal for this lab. When using the command line prompt, make sure that you navigate to the **Lab 2** directory so that you can run the java files.
   - Windows Users:
     i. Use the dos command, **cd**, to change folders, and navigate to the directory that contains your source code file. (You can find a handy listing of some basic dos commands at this site, http://www.cs.unca.edu/~jkdawg/help/msdos.html.)
   - Mac Users:
     i. Use the bash command, **cd**, to change folders, and navigate to the directory that contains your source code file. You can find a handy introduction to some basic bash commands at this site: https://www.makeuseof.com/tag/mac-terminal-commands-cheat-sheet/

3. Navigate to the **Lab 2** directory; create an empty file called **Triangle.java.** This is the Java source code file for your first program, so capitalization is important – the first letter must be capitalized and all the rest should be lower case.

4. Open the **Triangle.java** file in Notepad++/Sublime, write a program that displays a triangle with a base of ten or eleven characters. You will use Java println() statements to achieve this. Here is a line of code for the base of the triangle:

```
public class Triangle{
   public static void main(String[] args){
     System.out.println("__________");
   }
}
```



Note: Your triangle can be made with any characters. If you use the "\" character, you will need to use "\\" instead since the "\" is a special character in Java. Also note that your triangle will have spaces in it, where mine is just a drawing

5. Compile the source code file using the command prompt, use the command **javac** followed by a space and then the name of your source code file including the extension (`javac Triangle.java`). If there are no errors, view the contents of the **Lab 2** directory to see the additional file named **Triangle.class**. If error messages are displayed, reopen the **Triangle.java** file to discover how your file differs from the text shown above. Correct any errors and recompile.

6. To run the program, via command prompt, use the command **java** followed by a space and the name of your program without the extension (`java Names`). The program should display your names in the terminal.

7. Take a screenshot of the running of the code at the command line.

8. Upload and submit this screenshot along with the actual Triangle.java file you created to the submission area in Canvas

Part 2 Tasks

1. In Canvas, navigate to the **Lab2Files** folder and download to your **Lab 2** directory the files linked inside **Lab2Files**. You will see ten java files sequentially named Test1 through Test10. Make sure that you save them with their respective filenames.java (`Test1.java`).

2. Compile and execute each of these files. Many of the files have errors that you will need to correct before running the program. **As you are debugging, you may not rename any of the file names**. You are to document any errors that you find on the table provided in this lab; correct the error; and execute the program.

3. Complete the Lab 02 Quiz on the errors you find. You will have unlimited attempts on this quiz.