**Level 1: Dialogue Based Output**

1. Use the Eclipse (Juno or later) IDE. Use Eclipse from the applications folder on the classroom computers.
2. Follow the instructions in the “Hello World SWT” tutorial (Cheat Sheet Window)
   1. Create a new Java project
   2. Import SWT into your project following the tutorial
      * <https://wiki.eclipse.org/FAQ_How_do_I_configure_an_Eclipse_Java_project_to_use_SWT%3F>
      * Use archive version **swt-4.2.2-win32-win32-x86.zip** for compatibility with Eclipse Juno
   3. Complete the tutorial to display a dialog box with a “Hello World” title   
      (or something more useful)

**Level 2: Dialogue Based Input**

1. Research how to use SWT to read user input into your program.
2. Read string data
   1. Read a user typed string from a dialogue box
   2. Display the string in another dialogue box
3. Read integer data
   1. Read a user typed integer number from a dialogue box
   2. Multiply the number by 5
   3. Display the result in another dialogue box

**Level 3: Factorial Calculator**

1. Research the meaning of a “factorial” related to mathematics. Research the equation to calculate a factorial.
2. Design an algorithm (program method) using variables, loops, and conditionals to calculate a factorial for any number.
   1. Resource: <https://www.java-made-easy.com/java-for-beginners.html>
3. Write a program to calculate a factorial as follows:
   1. Get user input for a number using a dialogue box
   2. Calculate the factorial using your algorithm (method)
   3. Display the result in a dialogue box