# Lab 1: Chapter 1, “Introduction”

The following exercises are intended to help you apply and practise the concepts introduced in this module. This work is **not** submitted for marks. The questions are adapted are from material at the end of the chapter in your textbook under the “Exercises” and “Programming Projects” headings.

If you haven’t already done so, follow the instructions in the document “Setting up Your Java Environment—Windows” or “Setting up Your Java Environment—Apple Mac” to install your Java development environment. Create and run the HelloWorld application to test that your system is correctly set up.

1. Which of the following are not valid Java identifiers? Why?
2. Factorial Yes, Descriptive
3. anExtremelyLongIdenfierIfYouAskMe Yes, camelCase
4. 2ndLevel No, cannot start with a number
5. level2 Yes
6. MAX\_SIZE Yes, Constant
7. highest$ Yes $ allowed
8. hook&ladder No, & not allowed
9. Categorize each of the following situations as a compile-time error, run-time error, or logical error.
10. multiplying two numbers when you meant to add them LOGIC
11. dividing by zero RUN-TIME
12. forgetting a semicolon at the end of a programming statement COMPILE
13. spelling a word wrong in the output LOGIC
14. producing inaccurate results LOGIC
15. typing a [ when you should have typed ( COMPILE
16. View the video for the Lab 1 demonstration, which covers parts of the next two questions at <https://barabus.tru.ca/comp1131/module1_lab1.html>.
17. Enter, compile, and run the following application:

public class Test  
{  
 public static void main (String[ ] args)  
 {  
 System.out.println ("An Emergency Broadcast");  
 }  
}

1. Introduce the following errors, one at a time, to the program from Question 3 above. Record any error messages that the compiler produces. Fix the previous error each time before you introduce a new one. If no error messages are produced, explain why. Try to predict what will happen before you make each change.
2. change Test to test IDE Soft error
3. change Emergency to emergency Changes the output text
4. remove the first quotation mark in the string BREAKS STRING
5. remove the last quotation mark in the string BREAKS STING
6. change main to man NO ENTRY POINT TO THE CODE
7. change println to bogus NOT A METHOD
8. remove the semicolon at the end of the println statement COMPILE ERROR
9. remove the last brace in the program COMPILE ERROR

Review your work by viewing the solution sheet.