# Lab 2: Chapter 2, “Data and Expressions”

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 from material at the end of the chapter in your text under the “Exercises” or “Programming Projects” headings.

Try to answer the question based on reading the code. Then insert the statements in a Java program to see the actual result. For items 4 to 6 you will also need to print the value with a System.out.println statement after each modification.

Here is a brief video demonstration for parts of Questions 1 and 4, <https://barabus.tru.ca/comp1131/module2_lab2.html>.

1. What output is produced by the following code fragment? Explain.

System.out.print ("Here we go!"); OUTPUT1 ON A SINGLE LINE  
System.out.println ("12345"); OUTPUT1OUTPUT2 AND NEWLINE  
System.out.print ("Test this if you are not sure."); OUPTUT3  
System.out.print ("Another.");OUTPUT3OUTPUT4  
System.out.println ();NEWLINE  
System.out.println ("All done.");OUTPUT5 NEWLINE

Here we go!12345

Test this if you are not sure.Another.

All done.

1. What is wrong with the following program statement? How can it be fixed?

System.out.println ("To be or not to be, that is the  
question."); IDONT SEE IT OTHER THAN THE LINE BREAK

1. What output is produced by the following program statement? Explain.

System.out.println ("50 plus 25 is " + 50 + 25); “50 plus 25 is 5025”

1. What value is contained in the integer variable size after the following statements are executed?

size = 18; 18  
size = size + 12; 30  
size = size \* 2; 60 (assume continuation of code)  
size = size / 4; 15

1. What value is contained in the floating point variable depth after the following statements are executed?

depth = 2.4;  
depth = 20 - depth \* 4; 10.4  
depth = depth / 5; 2.08

1. What value is contained in the integer variable length after the following statements are executed?

length = 5;  
length \*= 2;10  
length \*= length;100  
length /= 100;1

1. Write four different program statements that increment the value of an integer variable total .

total += 1

total = total + 1

total++

++total

Review your work by viewing the solution sheet.