CPSC 1045: In Lab Exercise 5 [10 marks]

Complete these exercises individually. Please follow the instructions **carefully** and complete all of the steps. Demonstrate to the instructor that you have completed the exercises prior to leaving the lab today.

1. Create a new HTML file called ex5.html. Add the usual tags to make a complete HTML file. In the head of this file add the following line of code:
   `<script src = "ex5.js" type="text/javascript" defer></script>`
2. In the same directory, create a new JavaScript file called ex5.js
3. Inside ex4.js complete the following exercises:.
   a. Write the JavaScript that prompts for the user to enter their first name and last name (separately). Then print to the console a string composed of the first letter of the user's first name, followed by the first five characters of the user's last name, followed by a random number in the range 10 to 99. You may assume that the last name is at least five letters long
      Ex. If the user enters Wayne and Gretzky, your code should print to the console WGretz58 (where the number 58 could be any two digit number)
   b. Write the JavaScript to read a positive, non-zero number from the user, let's call this number x. Write the JavaScript to find the smallest positive integer y such that x*y is palindromic. You should then print x, y and x*y to the console. If the user enters a number less than or equal to zero, you should print an error message to the console.
      Ex. If the user enters x = 33 then y will be 1 because 33*1 = 33
      Ex. If the user enters x = 34 then y will be 8 because 34*8 = 272
      Ex. If the user enters x = 20, the problem has no solution because it is a multiple of 10, so an error message should be printed
4. Test that your JavaScript correctly executes for all of the problems by opening ex5.html in the browser and checking the output and the console.
5. When you have completed the exercises, call over the instructor or the lab assistant and demonstrate your program works. Be prepared to explain how you came up with solutions to these exercises.

Grading

- 2 marks A
- 8 marks B