CPSC 1045: In Lab Exercise 3 [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. Download ex3.zip from D2L and extract the files to your H drive.
2. Open ex3.html in a web browser and open the console window in the browser. You should see that the numbers 1 through 10 have been printed to the console.
3. Open ex3.js in your text editor. You will see that you have been given the code for a while loop that prints the numbers 1 through 10 to the console.
4. Inside this ex3.js complete the following exercises.
    a. Write the JavaScript that asks the user to enter a positive number using the prompt function and then print to the console the numbers from 1 to the user entered number.
    Ex. If the user enters 50, you should print the numbers 1 to 50 in the console.

    b. The four least commonly used letters in the English language are Z, Q, X, and J, respectively. Write the JavaScript to read a single letter from the user. Then write a **switch statement** that checks if the user entered one of these least letters, and prints out a message to the console.
    Ex. if the user enters Z your program should print “You entered the least common letter”
    Ex. if the user enters J your program should print “You entered the fourth least common letter”.

    c. Write the JavaScript to continuously prompt the user to enter numbers until the user enters a zero. When the user enters zero, you should alert back to the user how many numbers they entered.
    i.e., your program should continuously prompt the user for numbers until they enter zero, then print out the number of numbers they entered
    Ex. If the user enters 2, 8, 9, -100, 55, 78, 0 you should alert “You entered 6 non-zero numbers!” to the user.

5. Test that your JavaScript correctly executes for all of the problems by opening ex3.html in the browser and checking the output and the console.
6. 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
- 5 marks B
- 3 marks C