PROG 2700 ASSIGNMENT 1B – Basic JavaScripT

**Client-Side Programming**

# Prerequisites

### Strongly Recommended: Assignment 1A – FreeCodeCamp.org

# Summary

Write a collection of mini-javascript programs that perform a number of small computations. You will use the console of the browser to display your results. (ie. Console.log). Each requirement should reside in it’s own javascript file. It is suggested that you make a folder for each requirement that contains it’s own index.html file along with an accompanying main.js file as has been done in class demonstrations.

# Code Submission

**You must commit and push all of your code to your provided GitHub repository.** It is also required that you commit and push often so that you build a history of commits and pushes that you can show to the instructor.

# General Requirements



Write a function in JavaScript that will receive a string as a parameter and then perform the following:

* You don’t have to prompt for a string. Simply assign a string to a variable in your code as your starting point to use as an argument for your function.
* If the first and last characters of the string are the same (ignoring case), the function will return the string in reverse order. Otherwise, the function will return the string with the first and last letters removed.
* Example: “Triscuit” returns “tiucsirT” but “Cracker” returns “racke”.

Resources:

W3Schools: <https://www.w3schools.com/js/js_string_methods.asp>

MDN: <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/String>

Write a function in JavaScript that will return the sum of the longest streak of consecutive numbers within an array.

* If there are no consecutive numbers in the array, the function will return zero.
* If there are multiple instances of the same number of consecutive numbers in the array, the function will return the largest sum calculated between all instances.
* Examples:
  + [1, 2, 3, 6, 9, 34, 2, 6] would return 6 *(1+2+3)*
  + [3, 2, 7, 5, 6, 7, 3, 8, 9, 10, 23, 2, 1, 2, 3] would return 27 *(8+9+10)*
  + [100, 101, 102, 3, 4, 5, 6, 9] would return 18 *(3+4+5+6)*

Resources:

W3Schools: <https://www.w3schools.com/js/js_arrays.asp>

MDN: <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array>

Write a JavaScript program to calculate the number of weeks, days, hours, minutes and seconds left until midnight on your birthday.

* The script does not have to prompt for your birthdate. Simply assign it to a variable and start from there.
  + Ex: var myNextBirthday = *…your code here*
* Expected sample output (console.log()):
  + There are 35 weeks, 3 days, 13 hours, 25 minutes, and 12 seconds until my next birthday!

Resources:

MDN: <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date>

W3Schools: <https://www.w3schools.com/js/js_dates.asp>

Write a JavaScript program to iterate through an array of ten(10) positive randomly generated numbers. Each number will then be checked to see if it’s a primary number.

* Sample Expected output (console.log()).

23-yes, 15-no, 22-no, 124-no, 11-yes, 9-no, 2-yes, 13-yes, 5-yes, 1-no

# Instructions

1. **Don’t forget that a live in-person demonstration of your code is part of this assignment. You will need to show your code to the instructor in class on the due date while going through an evaluation of your code’s functionality. Part of the assessment will include your ability to speak about the code you wrote, even if it doesn’t completely work or do what you expect.**
2. **Late submissions will be subject to the late penalties laid out in the course outline.**

# Academic Integrity and Plagiarism

**Code sharing by any means is considered plagiarism and is strictly forbidden under the NSCC Academic Integrity policy.**

[NSCC ACADEMIC INTEGRITY GUIDELINES](https://www.nscc.ca/docs/about-nscc/policies-procedures/policy-academicintegrity.pdf)

[NSCC ACADEMIC INTEGRITY REPORTING POLICY](https://www.nscc.ca/docs/about-nscc/policies-procedures/procedures-academicintegritystudent.pdf)