Assignment 1
[10+9+1=20 marks]

Due: **Sunday, January 30, 2022 @23:59**

Objective:
Practice JavaScript basic syntax, built-in functions, and user-defined functions.

Specification:
Write a JavaScript program **a1.js** to perform the following two (2) tasks.
Create comment line(s) for each of the Tasks using block comments, indicating the start point of each Task. e.g.
```
/*************************** Task1 ************************/
```

Task 1: Play with numbers [10 marks]

Using function declaration, define a JavaScript function (name it: playNumbers),

   which takes indefinite number of parameters.

   This function does not return any value. Instead,

   (1) if the function call didn't pass any arguments, your function displays:

      There are no inputs.

      program terminates.

   (2) if one or more arguments are not numbers, your function displays:

      (The parameter) is not a number.

      for all the arguments that are not a number.

      e.g. if the parameters are ("abc", 3, "hello"), your program displays:

      abc is not a number.

      hello is not a number.

      program terminates.

   (3) Otherwise (if not (1) nor (2)),

   (3.1) it displays the largest value of all the parameters in the format:

      The largest number of (para1, para2,...) is (the largest value).

      e.g., The largest number of (9, 3, 6) is 9.

   (3.2) it displays the average of all the values in the format:

      The average of (para1, para2, ...) is (the average).

      e.g., The average of (9, 3, 6) is 6.

(4) Test your program using the following statements.

```javascript
console.log("/**************************** Task1 ************************/");

playNumbers();

playNumbers("abc", 3, "hello");

playNumbers(9,3,6);

playNumbers(3,5,1,3,5);

playNumbers("Good day!",3,4,32,"hi", "we");
```

output is as follows:

```
/**************************** Task1 ************************/
There are no inputs.
abc is not a number.
hello is not a number.
The largest number of (9, 3, 6) is 9
The average of (9, 3, 6) is 6
The largest number of (3, 5, 1, 3, 5) is 5
The average of (3, 5, 1, 3, 5) is 3.4
Good day! is not a number.
hi is not a number.
we is not a number.
```

Task 2: Celsius and Fahrenheit temperature converter [9 marks]

Using function expression, write a JavaScript function (name it: convertCF) convert temperatures between Celcius and Farenheit.

this function takes two parameters (val, cf),

where val is the value you need to convert.

This function does not return any result.

(1) if val is not a number, your function displays, "I need a number".

terminate the program.

(2) if cf is not "C" or "F", your function displays "I am confused :("

terminate the program.

(3) if cf is "C", val is the value in Celcius, your function will convert it to Farenheit degree, and display:

(val)C is equivalent to (the result from your calculation)F.

e.g., call function convertCF(0, C), it displays:

0C is equivalent to 32F.

(4) if cf is "F", val is the value in Farenheit, your function will convert it to Celcius degree, and display:

(val)F is equivalent to (the result from your calculation)C.

e.g., call function convertCF(122, F), it displays:

122F is equivalent to 50C.

(5) test (call) your function with the example input (parameters):

(0, C)

(32, F)

(122, F)

*/

Test with the following statements. The corresponding result follows.

console.log("/*************************** Task2 ***********************/");

convertCF("avc", "F");

convertCF("32", "M");

convertCF(32, 'F');

convertCF(0, "C");

convertCF(122, "F");

Sample result for the above function calls:

/*************************** Task2 ***********************/

I need a number.

I am confused :(

32F is equivalent to 0C

0C is equivalent to 32F

122F is equivalent to 50C

Submission:

Save your file as **a1.js**. Add the following comment declaration with your info at the top of your code: [1 mark]

```
/*****************************************************************************
 * Assignment 1
 * I declare that this assignment is my own work in accordance with Seneca Academic Policy.
 * No part of this assignment has been copied manually or electronically from any other source
 * (including web sites) or distributed to other students.
 * Name:___Student ID:_____Date: _____
 *****************************************************************************/
```

Submit your **a1.js** to Blackboard / My.Seneca -> A1

• Late submission:
10% penalty each day for up to 5 school days. After that, no submission will be accepted.