Lesson 21 – JavaScript Exercise

Goals: Practice creation of simple JS programs focused on:

- print / by modifying an HTML document
- input / by reading values from the user via prompt
- working with values, literals/variables,
- operators, operations/expressions,
- comparison, conditions and loops
- string manipulation
- code debugging



JS Debugging:

read about tracing code errors at: https://www.w3schools.com/js/js_debugging.asp

Exercises: Create a new HTML file for each of the tasks below:

- 1. Write a JavaScript program to print the "Hello World!" to the page.
- 2. Write a JavaScript program to print the contents (entire HTML) of the current document.
- 3. Write a JavaScript program that <u>asks for your name</u> and displays it using an alert box.
- 4. Write a JavaScript program that asks the user to input three numbers (a, b, c), <u>converts</u> the inputs to the proper numeric data type and prints the area of a triangle where lengths of the sides are a, b, c.
- 5. Write a JavaScript conditional statement to sort 3 numbers. Display an alert box to show the result.
- 6. Write a JavaScript conditional statement to find the sign of product of three numbers. Display an alert box with the specified sign.
- 7. Write a JavaScript FOR loop that will iterate from 0 to 15. For each iteration, it will check if the current number is odd or even, and display a message to the screen. Sample output:

0 is even

1 is odd

2 is even

•••

8. Write a JavaScript program to construct the following pattern, using a nested FOR loop:

*

* *

* * *

* * * *

9. Write a JavaScript program, that will prompt the user to input a series of numbers <u>ending with</u> zero. Alert the maximum value of the series.

Homework:

- Read the tutorial on string manipulation:
 - o https://www.w3schools.com/js/js_string_methods.asp
- Complete online exercises:
 - o [1], [2], [3], [4], [5], [6], [7], [8], [9]

Exercises:

- 1. Write a JavaScript program to check whether a user input is blank or not.
- 2. Write a JavaScript program to capitalize the first letter of each word in a string.
- 3. Write a JavaScript program that checks each letter of a string within a FOR loop and swaps the case of each letter:

Example input: "Hello World". Example output: "hELLO wORLD".

4. Write a JavaScript program to hide an email addresses to protect from unauthorized user. Use slicing and replacement methods

Example input: "robin_singh@example.com". Example output: "r***@example.com".

5. Write a JavaScript program to concatenate a user input n times (default is 1):

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Example input:
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text = prompt("Enter a string: ") // where user inputs "Ha!"
count = prompt("Times to repeat: ") // where user inputs 3
Example output:
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"Ha!Ha!Ha!"

6. Write a JavaScript program to check whether there is a word contained within a sentence provided by a user input.

Next lesson ---> TEST!