(For exercises 1, 2 and 3 create a single **.js** file with each method implementation)

1. Consider the following pseudocode:

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1. input n
2. print n
3. if n==1 then STOP
4. if n is odd then n=3n+1
5. else n=n / 2
6. GOTO 2

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    a. Implement an *iterative* method.in JavaScript
    b. Implement a *recursive* method in JavaScript.
    c. Which one is the best (iterative or recursive)? and Why?

2. Implement a method in JavaScript that checks if a given String is a palindrome (A **palindrome** is a word, phrase, number, or other sequence of characters which reads the same backward as forward, such as madam or racecar.)

3. Consider the following math expression:

$$8 \div 2 (2 + 2) = ?$$

    a. What's the result?
    b. Create method with JavaScript which implements the above expression and returns its value.

4. Consider the following Online Service:

- https://ipstack.com - It offers an API service to get location information given an IP Address.

a. Create a Free Account on IPSTACK.COM
b. Create a Client-Server Web Application with (PHP), with:
    i. A Responsive Webpage, with a beautiful CSS3 button which triggers an AJAX call to the server.
    ii. The server endpoint must get the location of the Client given its IP address, using the IPSTACK service and return it in JSON format.
    iii. The browser must render the location information returned by the server.

NOTE: Use pure PHP, HTML5, JS and CSS3.   Do not use libraries/frameworks.