Internet Technologies – Lab #4: JavaScript introduction

Write functions listed below – one function + example of use per file, files named 4a, 4b and so on. Use console.log to print the results of every function.

1. Function calculating the factorial of a number. Do this using recursion and iteration. Create recursive function using function expression, iterative function using function declaration
2. Function calculating nth number in Fibonacci sequence.
3. Write a JavaScript function that checks whether a passed string is palindrome or not
4. Write a JavaScript function that returns a passed string with letters in alphabetical order.  
   Example string : 'webmaster'   
   Expected Output : 'abeemrstw'
5. Write a JavaScript function that accepts a string as a parameter and find the longest word within the string
6. Write a JavaScript function that accepts a number as a parameter and check the number is prime or not
7. Write a JavaScript function which accepts an argument and returns the type
8. Write a JavaScript function which will take an array of numbers stored and find the second lowest and second greatest numbers, respectively.
9. Write a JavaScript function to convert an amount of money to coins.  
   Sample function : amountTocoins(46, [25, 10, 5, 2, 1])   
   Here 46 is the amount. and 25, 10, 5, 2, 1 are coins.   
   Output : 25, 10, 10, 1
10. Write a JavaScript program for binary search.