## 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.

- a) Function calculating the factorial of a number. Do this using recursion and iteration. Create recursive function using function expression, iterative function using function declaration
- b) Function calculating nth number in Fibonacci sequence.
- c) Write a JavaScript function that checks whether a passed string is palindrome or not
- d) Write a JavaScript function that returns a passed string with letters in alphabetical order.
  Example string: 'webmaster'
  Expected Output: 'abeemrstw'
- e) Write a JavaScript function that accepts a string as a parameter and find the longest word within the string
- f) Write a JavaScript function that accepts a number as a parameter and check the number is prime or not
- g) Write a JavaScript function which accepts an argument and returns the type
- h) Write a JavaScript function which will take an array of numbers stored and find the second lowest and second greatest numbers, respectively.
- i) 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

j) Write a JavaScript program for binary search.