Assignment 1

CLIENT-SIDE PROGRAMMING

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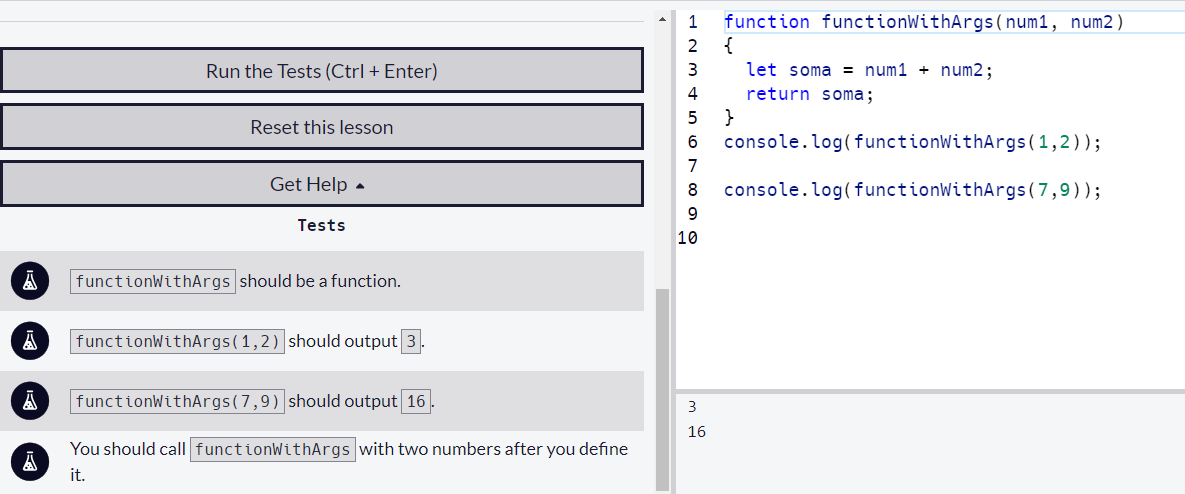
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# Activity 1 – Basic JavaScript on Freecodecamp.org

## PART A



As I showed in class, I finished the exercise, but one question was not validated by the platform. The image below demonstrates that.



# Activity 2 – Collection of mini-JavaScript programs

## Question 1

Second section of the activity goes here!

Write a function in JavaScript that will receive a string as a parameter and then perform the following:

* You don’t have to prompt for a string. Simply assign a string to a variable in your code as your starting point to use as an argument for your function.
* If the first and last characters of the string are the same (ignoring case), the function will return the string in reverse order. Otherwise, the function will return the string with the first and last letters removed.
* Example: “Triscuit” returns “tiucsirT” but “Cracker” returns “racke”.

## Code

## Browser

## Question 2

Write a function in JavaScript that will return the sum of the longest streak of consecutive increasing numbers within an array.

* If there are no consecutive numbers in the array, the function will return zero.
* If there are multiple instances of the same number of consecutive numbers (increasing by 1) in the array, the function will return the largest sum calculated between all instances.
* Examples:
  + [1, 2, 3, 6, 9, 34, 2, 6] would return 6 *(1+2+3)*
  + [3, 2, 7, 5, 6, 7, 3, 8, 9, 10, 23, 2, 1, 2, 3] would return 27 *(8+9+10)*
  + [100, 101, 102, 3, 4, 5, 6, 9] would return 18 *(3+4+5+6)*

## Code

## Browser

## Question 3

Write a JavaScript program to calculate the number of weeks, days, hours, minutes and seconds left until midnight on your birthday.

* The script does not have to prompt for your birthdate. Simply assign it to a variable and start from there.
  + Ex: var myNextBirthday = *…your code here*
* Expected sample output (console.log()):
  + There are 35 weeks, 3 days, 13 hours, 25 minutes, and 12 seconds until my next birthday!

## Code

## Browser

## Question 4

Write a JavaScript program to iterate through an array of ten(10) positive randomly generated numbers. Each number will then be checked to see if it’s a prime number.

* Sample Expected output (console.log()).

23-yes, 15-no, 22-no, 124-no, 11-yes, 9-no, 2-yes, 13-yes, 5-yes, 1-no

## Code

/\*

Author: Elaine Candido da Silva

Date: 1/18/2024

Description: Generate randomly 10 positive numbers and check if they are prime or not.

By definition, a prime number is a positive integer divisible only for itself and 1

\*/

// function to get if the number is prime or not

function isPrime(number) {

    if (number <= 1)  // 1 or below are not prime number

    {

        return false;

    } else if (number === 2) //the only even number which is prime

    {

        return true;

    }

    for (let i= 2; i < number; i++)

    { // Check if "number" is divisible by i without a remainder, it is not a prime number

     if (number % i === 0)

     {

        return false;

      }

    }

    // If number is only divided by itself and 1, it is a prime number

    return true;

    }

// Variables declaration

let numArray = [];

let resultIsPrime;

// Processing and Calculation

// Generate the 10 positive random numbers up to 100

for (let i=0; i<10; i++)

{

    let randomInteger = Math.floor(Math.random() \* 100);

    numArray[i] = randomInteger;

}

// Output

console.log(numArray);

console.log("");

for (let i=0; i<numArray.length; i++)

{

    resultIsPrime = isPrime(numArray[i]);

    if (resultIsPrime)

    {

        console.log(`Number ${numArray[i]} is Prime!`);

    } else

    {

        console.log(`Number ${numArray[i]} is no Prime!`);

    }

}

## Browser

A screenshot of a computer

Description automatically generated