Problem Sheet: JavaScript Functions   Data Representation

The following exercises are related to the use of JavaScript.

1. Create a git repository for your answers to this problem sheet. Push the repository to GitHub. Make a commit and push it to GitHub after each exercise.

2. (a) Write an arrow function in JavaScript that returns "Data Representation & Querying". Assign the arrow function equal to a variable and get the function to output to the console. A complete guide to arrow functions can be found at:

   `https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Functions/`
   `Arrow_functions`

   (b) Extend this arrow function that it now takes an argument and returns the passed variable. Assign the arrow function equal to a variable and get the function to output to the console.

   (c) Write an arrow function that takes two number and returns the sum of both numbers. Assign the arrow function equal to a variable and get the function to output to the console.

   (d) Write a function that multiply each number under 70 by 2 in the following array. **Hint:** use a .map function

   ```
   const ages = [25, 31, 42, 77];
   ```

3. In this exercise you are required to create an array, and then create arrow functions to add, remove and display the items in this array. To complete this exercise you will need to do the following:

   (a) Create an array of strings.

   (b) Create an addTask function:
       i. It receives a string as a parameter called task.
       ii. It adds the task to the array.
       iii. It prints a message in the console indicating the insertion.
       iv. It returns the number of elements in the array after the insertion.

   (c) Create a listAllTasks function:
       i. It iterates over all the tasks in the array.
       ii. It prints each array item in the console.

   (d) Create a deleteTask function:
       i. It receives a string as a parameter called task.
       ii. It removes that string from the array.
       iii. It prints in console a message indicating the deletion.
       iv. It returns the number of elements in the array after the deletion.