

LAB EXERCISE 8

Part 1: Arrays

1. Write an **arrow function** `findDetails(array, value)` that takes an array and a value as input and returns an object with the following properties:
 - a. **firstIndex**: The first occurrence of the value in the array
 - b. **lastIndex**: The last occurrence of the value in the array
 - c. **exists**: A boolean indicating whether the value exists in the array
2. Write a function `appearsMultipleTimes(arr, value)` that returns true if the given value appears more than once in the array, using both **`indexOf()`** and **`lastIndexOf()`**. Return false if it appears once or not at all.
3. Write a function `findAllPositions(arr, value)` that returns an array of all the indices where value appears in arr using **`indexOf()`** in a loop.
 - a. Example, `const arr = [5, 2, 3, 2, 5, 2]; console.log(findAllPositions(arr, 2));`
Should have the output, `[1, 3, 5]`
4. Write a JavaScript function that filters out senior citizens from an array of customer objects. A customer is considered a senior citizen if their age is 60 or above.

```
let customers = [
  { id: 001, f_name: 'Abby', l_name: 'Thomas', gender: 'M', married: true, age: 32, expense: 500, purchased: ['Shampoo', 'Toys', 'Book'] },
  { id: 002, f_name: 'Jerry', l_name: 'Tom', gender: 'M', married: true, age: 64, expense: 100, purchased: ['Stick', 'Blade'] },
  { id: 003, f_name: 'Dianna', l_name: 'Cherry', gender: 'F', married: true, age: 22, expense: 1500, purchased: ['Lipstik', 'Book'] },
  { id: 004, f_name: 'Dev', l_name: 'Currian', gender: 'M', married: true, age: 82, expense: 90, purchased: ['Book'] },
  { id: 005, f_name: 'Maria', l_name: 'Gomes', gender: 'F', married: false, age: 7, expense: 300, purchased: ['Toys'] }
];
```

5. Write a JavaScript function that transforms the *above* array of customer objects by adding a `full_name` property to each customer. The `full_name` should be generated based on the following conditions:
 - a. If the customer is male, the title should be "Mr."
 - b. If the customer is female, the title should be "Ms."
 - c. The full name should be a combination of the title, first name (`f_name`), and last name (`l_name`).
6. Write a JavaScript function that takes an array of names and returns a new array containing the lengths of each name.