**CPAN 113 FUNDAMENTALS OF JAVASCRIPT  
LAB 3: INTRODUCTION TO ARRAYS**

# OBJECTIVES

1. Understand how to declare and initialize arrays using different methods.
2. Practice common array operations such as adding, removing, and accessing elements.
3. Learn to use various array methods for iteration and transformation.

# INSTRUCTIONS

Complete the following tasks. Each task should be written and tested in a JavaScript file (e.g., lab3.js).

# TASK 1 DECLARING ARRAYS

* Declare an array **colors** using the **Array Constructor** and initialize it with three colors.
* Declare an array **sizes** using the **Array Literal Notation** and initialize it with three sizes.
* Declare an array **numbers** using **Array.of()** and initialize it with three numbers.

# TASK 2 MODIFYING ARRAYS

* Add an element to the end of the **colors** array using **push()**.
* Remove the last element from the **sizes** array using **pop()**.
* Access the second element in the **numbers** array and print it to the console.

# TASK 3 ARRAY METHODS

* Create a new array **filteredNumbers** by filtering the **numbers** array for values greater than 10 using **filter()**.
* Use **map()** to create a new array **squaredNumbers** by squaring each element in the **numbers** array.
* Use **forEach()** to print each element in the **colors** array to the console.

# TASK 4 ITERATING ARRAYS

* Iterate over the **numbers** array using a **for...of** loop and print each element.
* Iterate over the **sizes** array using a traditional **for** loop and print each element.
* Use the **entries()** method to get an iterator for the **colors** array and print each index and element pair.

# SUBMISSION

1. Ensure your code is saved in a file named lab3.js.
2. Test your code by running it in a JavaScript environment (e.g., browser console or Node.js).
3. Submit your lab3.js file via the course submission portal.
4. Attach a screenshot of the output along with the original code file.