

Lab Exercise 2 - Manipulating Arrays in JavaScript

Learning Outcome: Upon completion of this lab, students will be able to:

- Create and access data in an array.
- Manipulate data in an array by applying different array's methods and statements.

Time to complete lab exercise: 30 minutes.

Lab Instructions:

1. **Complete Class Examples:** Before starting the lab exercise, make sure you've thoroughly understood the examples covered in class. These examples serve as a foundation for the tasks you'll be completing in the lab.
2. **Complete the Lab Exercise:** Follow the instructions provided in the lab exercise description to enhance the provided JavaScript code.
3. **Upload Complete lastname.js File:** Once you have completed the lab exercise and tested your code, upload the entire 'lastname.js' file with the lab exercises. Ensure that your code is properly formatted and commented for clarity.

Lab Exercise Description:

This exercise aims to reinforce the concept of array manipulation in JavaScript through practical application. Encourage experimentation and exploration to deepen understanding and proficiency in working with arrays.

Lab procedure:

Follow these steps:

- Create a new JS file and save it with your last name as 'lastname.js'.
- Include your full name as a comment at the header of the JS file.
- Write the following codes in your JS file:
 - Create an array named 'mixed_value' with the following items as

```
Mixed_value = ['cat', 25, false, '#', -10.2]
```
- Prompt a window asking the user to enter an animal. The value that the user enters is added to the end of the mixed values array, `mixed_value`. Display the resulting array in the console as:

Mixed array with a new animal added to the end: _____

- Create an independent copy of the mixed array and name it `copyArray`. Reverse the values in the `copyArray` and display both the mixed array and the `copyArray` in the console as:

Mixed array: _____ and reverse of copy array: _____

Ensure that each step is implemented correctly and tested thoroughly before proceeding to the next step. Once you have completed all the tasks, upload the modified index.js file for evaluation.