

Lab 5, Part 1: Array Exercises

For each of the problems below, create an array, or write a function in a file named *ArrayExercises.js*. This web page contains code to test your solution code.

Basic Array Operations

1. Declare an array named *degrees*, but don't initialize it.
2. Write a function named *addDegree* that takes a degree name as a parameter and adds it to the *degrees* array.

Here is a listing of the array:

3. Write a function that lets you change the name of a degree by index.
We'll change the name of Computer Programming to Software Development
The degree with index 2 is named:

Using Arrays in Loops

1. Write a special function named *copyDegrees* to create a copy of the global *degrees* array.
It should take no parameters, just return a new array.
To demonstrate we'll create a new array named *programs* and we'll change the name of the third degree back to "Computer Programming".
In *degrees*, the third degree is:
In *programs*, the third degree is:
2. Write a function named *countMatches*, that takes two parameters, compares two arrays, and returns the number of elements with matching values.
We will compare the two arrays above. There should be 4 elements that contain the same values.
Number of matches:

Working with 2D Arrays

1. Declare an array named *checkers* to represent a checker board. Don't initialize it.
2. Write a function named *displayBoard* to display the board (it have no parameters and will return a string with the HTML that represents the board.)
The board:
3. Write a function named *makeMove* to place a Red or Black checker on the board. Your function will take these parameters: row, column, letter.
We'll use lower case letters to represent the checkers and just put 4 checkers on the board.
Checker board: