**C Programming Assignment: Array Operations**

**https://github.com/CYBS-3113/array-operations-djdcybersecurity**

A screenshot of a computer

Description automatically generated

Welcome to your C programming assignment! This task will help you practice working with arrays in C, including initialization, manipulation, and basic algorithm implementations.

**Objectives**

* Declare and initialize arrays.
* Use loops to manipulate and traverse arrays.
* Implement and test functions that operate on arrays.
* Work with GitHub Classroom and GitHub Actions.

**Task Description**

1. **Clone the Repository**  
   After accepting the GitHub Classroom assignment link, clone the repository to your local machine.
2. **Complete the Starter Code**  
   Open the provided file array\_operations.c. Implement the following functions:
   * initialize\_array: Populate an array with the values 5, 10, 15, 20, 25.
   * print\_array: Print all elements of the array on a single line.
   * find\_max: Find and return the maximum value in the array.
   * increment\_elements: Increment each element of the array by a given value.
   * reverse\_array: Reverse the order of the elements in the array.
3. **Write a main Function**  
   The main function should test all implemented functions:
   * Initialize the array.
   * Print the initialized array.
   * Increment the array values by 2 and print the updated array.
   * Find and display the maximum value in the array.
   * Reverse the array and print the reversed result.

**Example Output**

Your program should produce the following output:

Initialized array: 5 10 15 20 25

Array after incrementing by 2: 7 12 17 22 27

Maximum value: 27

Reversed array: 27 22 17 12 7