**C Programming Assignment: Array Operations**

**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**