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| **MIDTERM - Skill Test** | |
| **Course Code:** 201L | **Program:** BSCpE |
| **Course Title:** Data Structure and Algorithm | **Date Performed:** Sep 06, 2025 |
| **Section:** 2A | **Date Submitted:** Sep 06, 2025 |
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| 1. **Objectives** | |
| Implement an array of less than 50 but not less than 20   * Display the Array * Find the Maximum Element * Reversed the Array * To demonstrate the use of functions. * To practice array operations including filtering, reversing, and finding maximum values. | |
| 1. **Discussion**   In this Skill Test, I generate a list of even numbers within a specific range using a ‘for’ loop and conditional statements. By remembering logic in a function, I manage to use the importance of reusable code. The use of slicing (‘[::-1]’) used to reverse the array efficiently, and the built-in ‘max()’ function helped to identify the highest value in the list. | |
| **3. Materials and Equipment** | |
| * Google Colab * Word * GitHub | |
| **4. Procedure** | |
| * Define a function ‘even\_numbers()’   - Initialize the Array  - Check every number in the range 20 to 50 by using for loop.  - Check if it’s the array has no remainder  - Appends even numbers to a list.   * 2. Call the function and store the result in a variable. * 3. Use slicing to reverse the list. * 4. Apply ‘max()’ to find the highest even number. * 5. Print the results using `\n` to separate sections:   - Original even numbers  - Maximum value  - Reversed array | |
| **5. Output** | |
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| **6. Conclusion**  This activity tests my programming skills in Python, including function creation, list manipulation, and my output formatting. By structuring the code and output clearly, I improved both the readability and maintainability of my work. | |
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