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| **MIDTERM SKILL TEST** | |
| **Course Code**: CPE-201L | **Program:** BSCPE |
| **Course Title:** Data Structure and Algorithm | **Date Performed:** 09/06/25 |
| **Section:** 2A | **Date Submitted:** 09/06/25 |
| **Name:** Nerio, Hannah Grace A. | **Instructor:** Engr. Maria Rizette H. Sayo |
| 1. **Objectives** | |
| * To apply array concepts in storing and manipulating a specific set of numbers within a given range * To demonstrate the use of basic array operations such as displaying elements, identifying the maximum value and reversing the order of elements. | |
| **2. Discussion** | |
| Arrays are used to store multiple values of the same type under one variable name. In this activity, we manually assigned even integers from 20 to 48 into specific array indices. This approach strengthens understanding of how data is stored and accessed in an array. Operations such as displaying all elements, finding the maximum element, and reversing the array demonstrate the flexibility and usefulness of arrays in solving programming problems. | |
| **3. Materials and Equipment** | |
| * Computer * Google Colab * Github * Programming **Language** | |
| **4. Procedure** | |
| 1. Declare an array and manually assign each element to its index position. 2. Display all array elements with their indices 3. Find the maximum element using iteration and comparison 4. Reverse the array by accessing it from the last index down to first 5. Print results of each operation | |
| **5. Output** | |
| **A screenshot of a computer  AI-generated content may be incorrect.** | |
| 1. **Conclusion**   The activity showed how arrays can be used to store numbers in an organized way and how different operations can be applied to them. Assigning the values one by one to each index made the role of indexing clearer and easier to understand. Displaying all the elements proved that arrays are useful for keeping data in sequence and that accessing them is simple when the index is known. Finding the maximum element showed how comparisons work in a program and why checking each value is important to get the right result. Reversing the array gave practice in changing the order of values and in handling loops carefully. The results also highlighted how small details, like correct indexing and proper output formatting, make the program more accurate and readable. This activity improved understanding of array basics, strengthened logical thinking, and gave more confidence in handling simple coding tasks. It also built a stronger foundation that will be useful for more advanced programming lessons in the future. | |
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