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| **Midterm Skill Test** | |
| **Course Code: CPE 201** | **Program: BS Computer Engineering** |
| **Course Title: Data Structure and Algorithm** | **Date Performed:** |
| **Section: BSCPE – 2B** | **Date Submitted:** |
| **Name: Tan, Charles Dominic S.** | **Instructor:** **Engr. Maria Rizette H. Sayo** |
| 1. **Objectives** | |
| Enumerate the objective of the activity (at least 2)   1. To create an array of integers in Python and then carry out the basic operations like traversal, counting, and classifying elements.   2. To learn how array lists work in Python by practicing indexing, looping, and using conditional statements. | |
| **2. Discussion** | |
| Discuss here the relevant concepts of the activity in your own words.  here we used Python lists to represent parameters arrays with integer values that lie between 20 and 50 inclusive. By traversing the array, we have displayed each item one after the other, counted all in total using len() function, and classified numbers into either odd or even numbers using conditional statements. Thus, we can outline the efficiency of arrays in organizing and managing data. | |
| **3. Materials and Equipment** | |
| What materials did you use? Explain in detail.   * **Acer Computer** – main device used for coding, testing, and running the program. * **Microsoft Word** – used for documenting the activity and preparing the report. * **ComLab (Computer Laboratory)** – place where the activity was done using school computers. * **GitHub** – used to save, upload, and share program codes for submission. * **Globe Internet Data** – personal internet connection used to access online resources and upload files. | |
| **4. Procedure** | |
| What are the procedures that you performed?   * An array comprising integers from 20 to 50 inclusive is declared. * A function named traverse() is written to display all array elements. * By using the len() function, the total number present in the array is counted. * Traversed the array again to check each number and classify it as even or odd using the modulo operator (%). * Displaying the results of array elements, total count, count of even numbers, and count of odd numbers. | |
| **5. Output** | |
| Screenshot of your outputs based on the procedures. | |
| **6. Conclusion**  In this test we created a list of numbers in Python and performed some simple operations such as displaying all the numbers, counting them, and checking for odd and even numbers. | |
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