|  |  |
| --- | --- |
| **Long Quiz No. <1> <Skill Test>** | |
| **Course Code: CPE 201** | **Program: BS Computer Engineering** |
| **Course Title: Data Structure and Algorithm** | **Date Performed: 30/08/2025** |
| **Section: BSCPE – 2B** | **Date Submitted: 30/08/2025** |
| **Name: Tan, Charles Dominic S.** | **Instructor:** **Engr. Maria Rizette H. Sayo** |
| 1. **Objectives** | |
| Enumerate the objective of the activity (at least 2)   * To demonstrate how to traverse a list in Python and process elements one by one. * To manipulate string data by replacing spaces with underscores and reversing the order of elements. | |
| **2. Discussion** | |
| Discuss here the relevant concepts of the activity in your own words.   * **Traversal of a list**: We go through each element of a list using a for loop and perform actions like replacing spaces with underscores. * **String manipulation**: We join the list of characters into a string, reverse the name, and format the output in a specific way with underscores instead of spaces. * The **output** shows both the traversal of the name character by character and the final formatted name in reverse order. | |
| **3. Materials and Equipment** | |
| What materials did you use? Explain in detail.   * **Materials**: Google Colab for running Python code, GitHub for version control and sharing code, Microsoft Word for writing the activity report. * **Equipment:** A computer with Globe internet access. Google Colab is used for writing and executing Python code directly in the browser, while GitHub is used to store and share the code. Microsoft Word is used for documenting the activity and creating reports. | |
| **4. Procedure** | |
| What are the procedures that you performed?   * Start by defining the list arr with individual characters of the name, including spaces.   Create a function (traverse()) that:   * Traverses the list and prints each character, replacing spaces with underscores. * Joins the list into a string and replaces the spaces with underscores. * Splits the string into parts, reverses the name, and then joins it back with underscores. * Execute the function with the provided list and observe the results. | |
| **5. Output**   * The program prints each character of the name, with spaces replaced by underscores. * After the traversal, the program prints the full name with underscores. * The program then prints the reversed name with underscores. | |
| Screenshot of your outputs based on the procedures. | |
| **6. Conclusion**  In this exercise, we demonstrated some concepts of Python, such as traversing lists, manipulating strings, and formatting. As we traversed throughout the name and attempted to substitute spaces with underscores and reverse its order, we demonstrated some simple ways through which programming techniques are used in text processing. The exercise reiterated loops, conditionals, and string operations, all key Python constructs useful for many applications in the real world. | |
|  | |