

SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE

Constituent of Symbiosis International (Deemed University), Pune

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| **Assignment No.: 08** | |
| Course Name | Programming in C Lab |
| Name of Student | Faheemuddin Sayyed |
| PRN No. | 23070122196 |
| Branch | CSE |
| Class | C-1 |
| Academic Year & Semester | 2023-2024 & Semester 2 |
| Date of Performance | 29/03/2024 |
| Assignment Title (Full): | Write a C program to accept a string from console and to display the following on console (without using built-in functions):   1. Length of the string 2. Total number of characters in the string 3. Total number of vowels in the string 4. Copy one string into another |
| Theory:(Note: According to the assignment title, please write the background information as an introduction, then write the steps/logic/process/algorithm of the C program in the Journal Notebook, and add its screenshot in the below theory response.) | |
| **Theory Response:**   1. Define functions for calculating string length, converting characters to uppercase, counting characters, counting vowels, and copying strings. 2. Implement the length function to count characters in a string. 3. Implement Upper function to convert characters to uppercase. 4. Implement char\_len function to count characters in a string (ignores non-alphabetic characters). 5. Implement vow\_len function to count vowels in a string (considers both uppercase and lowercase). 6. Implement Copy function to copy one string to another. 7. In the main function, declare two arrays to store strings. 8. Read a string from the user. 9. Copy the string to another array. 10. Print the copied string, length of the string, number of characters, and number of vowels. | |
| Output:(Note: Execute the C program as per the assignment title, take an input code and output result screenshot with the date and time from your computer, and add its screenshot in the below output response.) | |
| **Output Response:** | |
| Conclusion:(Note: Write the key findings or outcome from this assignment, enlist their potential real-world applications in Journal Notebook, and add its screenshot in the below conclusion response.) | |
| **Conclusion Response:**  The program defines functions to manipulate strings and provides basic functionalities such as copying strings, counting characters, and counting vowels. It demonstrates the use of functions to perform these operations on user-input strings. | |

Please note that assignment content can be readable.

**Faculty Name:**

Dr. Kanhaiya Sharma

Prof. Mahesh Arse

Prof. Sachin R. Gaikwad

Prof. Surabhi Thatte