

SDM COLLEGE OF ENGINEERING & TECHNOLOGY, DHARWAD

Department of Computer Science and Engineering

Laboratory Assessment

Course. Title & Code : **Advance C Programming (22PLC25E)**

Semester : II

Date : 10-08-2023

1. Write a modular C-program to check whether a given string is palindrome or not using pointers.
2. Write a modular C program to print the sum of primary diagonal elements using pointer notations.
3. Define a structure called **student_info** that will contain USN, Name of the student, marks in 3 IAs and CTA as its members. Using **student_info**, write a modular C program to read the information about 50 students into an array **Students**. Compute and print CIE (sum of best 2 IAs + CTA) marks of each student in the following format:
USN Name IA1 IA2 IA3 CTA CIE
4. A book shop uses a personal computer to maintain the inventory of books that are being sold at the shop. The list includes details such as author, title, price, publisher, stock position. etc. Whenever a customer want a book, the shop keeper inputs the title and author of the book and system replies whether it is in the list or not. If it is not in the list, an appropriate message is to be displayed. If it is in the list, then the system displays the book details and asks for number of copies. If the requested copies are available, the total cost of the books are displayed, otherwise the message “required copies not in the stock” should be displayed.
5. Write a C program to input a list of numbers within the range 0-4 from the user and then find the frequency of each of them.
6. Write a C program to store a character string in a block of memory space created by malloc () and then modify the same to store a largest string.
7. Write a c program to read data from the keyboard and write to a file called INPUT, again read the same data from the INPUT file, and count the number of lines in the file and print the same on the screen.
8. Write a C program to open a file named **EXAMINATION** and store in it the following data.:

Student name	IA1	IA2	IA3	CTA
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AAA	18	17	8	4
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BBB	12	19	10	8
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Extend the program to read the data from the file and display the examination table with the total marks of each student.

9. Write a modular C program to print nth fibonacci term using recursive function. Also print how many times the recursive function is called.
10. Write a modular C program to sort the given marks of 'n' students in the course of C-programming using insertion sort.

Question #	1	2	3	4	5	6	7	8	9	10
COs	1	1	1	1	2,5	2,5	3	3	4	4

Faculty members

- 1.
- 2.
- 3.