

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Programming in C**

Lab Journal

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SEM-II

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List of Experiments

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| **Sr.**  **No.** | **Title of Experiment** |
| 1 | Design and develop a flowchart or an algorithm that takes three coefficients a,b and c of a quadratic equation (ax2+bx+c=0) as input and compute all possible roots. |
| 2 | Write a C program for the developed flowchart/algorithm and execute the same to output the possible roots for a given set of coefficients with appropriate messages. |
| 3 | Write a C Program to relate two integers using =, > or < using nested ifs &  multiple ifs. |
| 4 | Write a C program to find whether (using switch case)   1. A given number is prime or composite. 2. A given number is even or odd. |
| 5 | Write a C program to generate the Fibonacci Series for a given number ‘n’. |
| 6 | Write a C program of binary search for a user-given element in a set of ‘n’ numbers. |
| 7 | Write a C program to perform matrix operations like addition, subtraction and transpose |
| 8 | 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 the other. |
| 9 | Write a C program using functions to accept two strings from the console and perform the following operations (without using built-in functions):   1. Compare the strings: equal/not equal 2. Find the longer string. 3. Concatenate the two strings. 4. Find occurrence of substring in the main string |
| 10 | Write a C program using functions to accept a one-dimensional array of integers and sort them in ascending order. |

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| 11 | Write a C program of selection sorting using functions. |
| 12 | Write a C program to find the factorial of a number using recursion |
| 13 | Write a C program using structures to print the pay slip of an employee after accepting details like id. no, name, designation, department and basic salary |
| 14 | 1. Write a program to demonstrate compile time memory allocation 2. Write a program to demonstrate runtime memory allocation |
| 15 | Write a C Program to demonstrate Structure pointer. |

Prepared By:

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