

**15ACS02-COMPUTER PROGRAMMING LAB**  
(Common For All Branches)

**L T P C**  
**0 0 3 2**

WEEK	LIST OF EXPERIMENTS
1	Practice DOS Commands necessary for design of C Programs.
2	Practice LINUX Commands necessary for design of C Programs.
3	Practice the Raptor Tool
4	<ul style="list-style-type: none"> <li>a. Write a program to perform arithmetic operations.</li> <li>b. Write a program to exchange two numbers without using temporary variable</li> <li>c. Write a program to exchange two numbers with temporary variable</li> <li>d. Write a program to find the maximum of three numbers</li> </ul>
5.	<ul style="list-style-type: none"> <li>a. Write a program for <math>s=ut+1/2at^2</math></li> <li>b. Write a program to find area of square, circle and rectangle.</li> <li>c. Write a program to find the maximum of two numbers using ternary operator.</li> <li>d. Write a program for sum of first N natural numbers.</li> </ul>
6	<ul style="list-style-type: none"> <li>a. Write a program to compute the factorial of a given number.</li> <li>b. Write a program to check whether the number is prime or not.</li> <li>c. Write a program to check for number palindrome.</li> <li>d. Write a program to generate Fibonacci numbers in the given range.</li> </ul>
7	<ul style="list-style-type: none"> <li>a. Write a program to find the sum of the digits of a number.</li> <li>b. Write a program to find the sum of positive and negative numbers in a given set of numbers.</li> <li>c. Write a program to perform the operations addition, subtraction, multiplication of complex numbers.</li> <li>d. Write a program to find the sum of first and last digit numbers in a given number.</li> </ul>
8	<ul style="list-style-type: none"> <li>a. Write a program to read two matrices and print their sum and product in the matrix form.</li> <li>b. Write a program to find the maximum of a set of numbers.</li> <li>c. Write a program to read matrix and perform the following operations.               <ul style="list-style-type: none"> <li>a. Find the sum of Diagonal Elements of a matrix.</li> <li>b. Print Transpose of a matrix.</li> <li>c. Print sum of even and odd numbers in a given matrix.</li> </ul> </li> </ul>
9	<ul style="list-style-type: none"> <li>a. Write a program to accept a line of characters and print the count of the number of Vowels, Consonants, blank spaces, digits and special characters.</li> <li>b. Write a program to insert a substring in to a given string and delete few characters from the string. Don't use library functions related to strings.</li> <li>c. Write a program to read two strings and perform the following operations without using built-in string Library functions and by using your own implementations of functions.               <ul style="list-style-type: none"> <li>i. String length determination      ii. Compare Two Strings</li> <li>iii. Concatenate them, if they are not equal      iv. String reversing</li> </ul> </li> </ul>
10	<ul style="list-style-type: none"> <li>a. Write programs using recursion for Factorial of a number, GCD, LCM, Towers of Hanoi.</li> <li>b. Write a program for tic-tac-toe game.</li> <li>c. Write a program to implement numerical methods Lagrange's interpolation, Trapezoidal rule.</li> </ul>

