

Programming in C Language Lab (Practical) _UHSES0124 _AY 2025-26

Experiment No.	Experiment Title	Sub-Experiment	
Experiment No. 1	To study different Linux commands and different IDEs.	Write Ten Linex commands and name different IDEs used for C Programming.	
Experiment No. 2	To study variables and constants in “C” Practical/Experimentation:	Declare and initialize variables and constant using assignment statement and scanf function. Use printf function to display the variables – (data type formatting)	
Experiment No. 3	To Study arithmetic operators in “C”	1.Develop a program to use arithmetic operators.	
		2. Write a program to calculate and display the area and perimeter of a circle, triangle and rectangle.	
Experiment No. 4	To Study logical operators and Conditional execution.	1. Write a C program to check whether an entered character is a vowel or consonant.	
		2. Write a C program to find the largest among 3 numbers entered by the user using a nested if else statement.	
		3. An electric power distribution company charges its domestic consumers as follows. Write a program to calculate electricity bill (accept number of units from user) according to the following criteria	
		Units	Price
		First 100 units	No charge
		Next 100 units	Rs 5 per unit
		After 200 units	Rs 10 per unit
	To Study concepts of Decision	1. Write a C program to check whether the entered number is palindrome or not.	
		2. Write a C program to check whether the entered number is an even or odd.	

Experiment No. 5	Making and Looping.	3. Write a C program to list all the prime numbers between 1 and n, where n is a value entered by the user.
		4. Write C program to print Fibonacci series upto the number entered by user.
Experiment No. 6	To Study User Defined functions.	1. Develop a function which accepts a integer array and print the array.
		2. Develop a Menu driven program to perform arithmetic operations(+,-,/,*) and display the result using user defined functions.(switch case using function)
		3. Write C program that convert a lowercase character to uppercase using a user defined function.
		4. Write a C program for Swapping of two numbers using call by value.
Experiment No. 7	To Study Concept of Arrays.	1. write a C program to show sum of 10 elements of an array and their average.
		2. Write a C program for finding smallest and largest numbers from given numbers from elements of an array.
		3. Write a program for to check given String is Palindrome or not using string handling functions
		4. Write a C program Replace a specified character from a string with another character.
Experiment No. 8	To Study Multi-Dimensional Array	1. Implement Matrix Addition, Subtraction and Multiplication using 2D array.
		2. Write a C program to calculate the sum of the Upper triangular elements of a matrix. (matrix size taken from user)
		3. Write a C program to generate transpose of matrix.
		4. Write a C program to calculate the sum of the primary diagonal elements of a 2x2 matrix.

Experiment No. 9	To Study Concept of Pointers.	1. Write a C program for Swapping of two numbers using call by reference.
		2. Develop a function to accept array arguments using pointer, modify and display contents of the array using pointer.
Experiment No. 10	To Study Memory allocation in “C”	Write a program for dynamic array creation(allocation) using malloc() /calloc() function and destroying(deallocation) using free() function.