20SO8351- C PROGRAMMING LAB

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Offering Branches Course Category:				Skill Oriented Course							Credits:		2	
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Course Type:				Theory + Laboratory							Practical:		1-0-2	
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UNIT-5	User defin to structur variables, User defin	on call, Parameter passing, Recursion, Storage classes. ned data types : introduction to enum, introduction to typedef, introduction res, and introduction to union Declaration and Initialization of pointer Pointer arithmetic, Pointers and arrays ned data types: introduction to enum, introduction to typedef, introduction es, and introduction to union	CO1, CO3
	1	Course Content (Laboratory Component)	000
Experin	nent No.1	 Write a program to print sample strings like "hello world", "Welcome to C Programming" with different formats. Write a Program to print different data types in 'C' and their ranges. Write a Program to initialize, assignment & printing variables of different data types. 	CO1, CO2, CO3, CO4, CO5
Experin	nent No.2	 Write a Program to demonstrate arithmetic operators. (+,-,*,/,%) Write a Program to demonstrate logical operators. (logical AND, logical OR) Write a Program to read radius value from the keyboard and calculate the area of circle and print the result in both floating and exponential notation. Write a Program to calculate simple interest. Write a Program to convert temperature. (Fahrenheit – Centigrade and vice-versa) 	CO1, CO2, CO3, CO4, CO5
Experin	ient No.3	 Write a Program to read marks of a student in six subjects and print whether pass or fail (using if-else). Write a Program to calculate roots of quadratic equation (using if-else). Write a Program to perform arithmetic operations using switch case. Write a Program to display vowels and consonants using switch case 	CO1, CO2, CO3, CO4, CO5
Experin	nent No.4	 Do the Following Programs Using for, while, do-while loops. 1. Write a program to calculate sum of individual digits of a given number. 2. Write a program to check whether given number is palindrome or not. 3. Write a program to print prime numbers in the given range. 4. Write a program to display multiplication tables from 1 to 10 except 3 and 	CO1, CO2, CO3, CO4, CO5
Experin	nent No.5	 Write a program to print the Fibonacci series for given 'N' value. Write a program to check whether a given number is a Fibonacci number or not. Write a program to read 2 numbers x and n then compute the sum of the Geometric Progression. 1+x+ x2 +x3 + + x^n 	CO1, CO2, CO3, CO4, CO5
Experin	nent No.6	 Write a program to store 10 elements in the 1-D array and print sum of the array. Write a program to print minimum and maximum elements in the 1-D array. Write a program to count no. of positive numbers, negative numbers and zeros in the array 	CO1, CO2, CO3, CO4, CO5
Evnovin	ent No.7	1.Write a program to perform various string manipulations using	CO1,

	built-in functions.CO2,2.Write a program to verify the given string is palindrome or not (without built-in functions, with using built-in functions).CO3,3.Write a program to concatenate two strings using arrays.CO5
Experiment N	0.8 1.Write a program to find sum of two numbers using functions. 2.Write a program to swap two numbers using Call By Value 3.Write a program to calculate factorial using recursion and non- recursion functions.CO1, CO2, CO3, CO4, CO5
Experiment N	0.9 1.Write a program to swap two numbers using Call By Reference 2.Write program to perform arithmetic operations using pointer 3.Write a program matrix addition using pointersCO1, CO2, CO3, CO4, CO5
Experiment No	 b.10 1.Write a program to display a day associated with a number using enum(assume Sunday=0 to Saturday=6) 2.Write a program to create structure and union for an account holder in a bank with following Fields: name, account number, address, and balance and display the details of five account holders. 3.Write a program to alias int with integer, char with character, float with flt and double with dbl using typedef.
	Learning Resources
Text Books	1. Programming in C, ReemaThareja, AICTE Edition, 2018, Oxford University Press.
Reference Books	 Computer Science: A Structured Programming Approach Using C, B. A. Forouzan and R.F. Gilberg, Third Edition, 2007, Cengage Learning. Programming in C, PradipDey, ManasGhosh, AICTE Edition, Oxford
	 University Press. 3. Programming with C, B. Gottfried, Third Edition, 2017, Schaum's outlines, McGraw Hill. 4. Problem Solving & Program Design in C,Jeri R. Hanly,Ellot B. Koffman,5th Edition, Pearson.
e-Resources& other digital material	 http://cprogramminglanguage.net/ https://www.geeksforgeeks.org/c-programming-language/ https://www.greatlearning.in/academy/learn-for-free/courses/c-programming https://www.udemy.com/course/the-complete-c-programming/ https://nptel.ac.in/courses/106/105/106105171/