**BE FIRST YEAR, I/II SEM (CBCS)**

**C programming Practical List**

|  |  |
| --- | --- |
| Lab | **Detailed Content** |
| 1. | **Introduction:**   1. [C "Hello, World!" Program](https://www.programiz.com/c-programming/examples/print-sentence). 2. [C Program to Add Two Integers](https://www.programiz.com/c-programming/examples/add-numbers). 3. [C Program to Multiply two Floating Point Numbers](https://www.programiz.com/c-programming/examples/product-numbers). 4. [C Program to Find ASCII Value of a Character](https://www.programiz.com/c-programming/examples/ASCII-value-character). 5. [C Program to Find the Size of int, float, double and char](https://www.programiz.com/c-programming/examples/sizeof-operator-example). 6. [C Program to Swap Two Numbers](https://www.programiz.com/c-programming/examples/swapping) using temporary variable. 7. [C Program to Swap Two Numbers](https://www.programiz.com/c-programming/examples/swapping) without using temporary variable. |
| 2. | **Decision and Loops:**   1. [C Program to Check Whether a Number is Even or Odd](https://www.programiz.com/c-programming/examples/even-odd). 2. [C Program to Check Whether a Character is Vowel or Consonant](https://www.programiz.com/c-programming/examples/vowel-consonant). 3. [C Program to Find the Largest Number Among Three Numbers](https://www.programiz.com/c-programming/examples/largest-number-three). 4. [C Program to Find all Roots of a Quadratic Equation](https://www.programiz.com/c-programming/examples/quadratic-roots). 5. [C Program to Check Leap Year](https://www.programiz.com/c-programming/examples/leap-year). 6. [C Program to Check Whether a Number is Positive or Negative](https://www.programiz.com/c-programming/examples/negative-positive-zero). 7. [C Program to Check Whether a Character is an Alphabet or not](https://www.programiz.com/c-programming/examples/alphabet). 8. [C Program to Calculate the Sum of Natural Numbers](https://www.programiz.com/c-programming/examples/sum-natural-numbers). |
| 3. | 1. [C Program to Find Factorial of a Number](https://www.programiz.com/c-programming/examples/factorial). 2. [C Program to Generate Multiplication Table](https://www.programiz.com/c-programming/examples/multiplication-table). 3. [C Program to Display Fibonacci Sequence](https://www.programiz.com/c-programming/examples/fibonacci-series). 4. [C Program to Find GCD of two Numbers](https://www.programiz.com/c-programming/examples/hcf-gcd). 5. [C Program to Find LCM of two Numbers](https://www.programiz.com/c-programming/examples/lcm). 6. [C Program to Display Characters from A to Z Using Loop](https://www.programiz.com/c-programming/examples/display-alphabets). 7. [C Program to Count Number of Digits in an Integer](https://www.programiz.com/c-programming/examples/digits-count). 8. [C Program to Reverse a Number](https://www.programiz.com/c-programming/examples/reverse-number). |
| 4. | 1. [C Program to Calculate the Power of a Number](https://www.programiz.com/c-programming/examples/power-number). 2. [C Program to Check Whether a Number is Palindrome or Not](https://www.programiz.com/c-programming/examples/palindrome-number). 3. [C Program to Check Whether a Number is Prime or Not](https://www.programiz.com/c-programming/examples/prime-number). 4. [C Program to Display Prime Numbers Between Two Intervals](https://www.programiz.com/c-programming/examples/prime-number-intervals). 5. [C Program to Check Armstrong Number](https://www.programiz.com/c-programming/examples/check-armstrong-number). 6. [C Program to Display Armstrong Number Between Two Intervals](https://www.programiz.com/c-programming/examples/armstrong-number-interval). 7. [C Program to Display Factors of a Number](https://www.programiz.com/c-programming/examples/factors-number). 8. [C Program to Make a Simple Calculator Using switch...case](https://www.programiz.com/c-programming/examples/calculator-switch-case). |
| 5. | **Function & Recursion:**   1. [C Program to Display Prime Numbers Between Intervals Using Function](https://www.programiz.com/c-programming/examples/prime-interval-function). 2. [C Program to Check Prime or Armstrong Number Using User-defined Function](https://www.programiz.com/c-programming/examples/prime-armstrong-function). 3. [C Program to Find the Sum of Natural Numbers using Recursion](https://www.programiz.com/c-programming/examples/natural-number-sum-recursion). 4. [C Program to Find Factorial of a Number Using Recursion](https://www.programiz.com/c-programming/examples/factorial-recursion). 5. [C Program to Find G.C.D Using Recursion](https://www.programiz.com/c-programming/examples/hcf-recursion). 6. [C Program to Convert Binary Number to Decimal and vice-versa](https://www.programiz.com/c-programming/examples/binary-decimal-convert). 7. [C Program to Convert Octal Number to Decimal and vice-versa](https://www.programiz.com/c-programming/examples/octal-decimal-convert). 8. [C program to Reverse a Sentence Using Recursion](https://www.programiz.com/c-programming/examples/reverse-sentence-recursion). 9. [C program to calculate the power using recursion](https://www.programiz.com/c-programming/examples/power-recursion) |
| 6. | **Array and Pointer:**   1. [C Program to Calculate Average Using Arrays](https://www.programiz.com/c-programming/examples/average-arrays). 2. [C Program to Find Largest Element of an Array](https://www.programiz.com/c-programming/examples/array-largest-element). 3. Write a program to count no. of positive numbers, negative numbers and zeros in the array. 4. Write a program to search the given element by using linear search. 5. [C Program to Add Two Matrix Using Multi-dimensional Arrays](https://www.programiz.com/c-programming/examples/add-matrix). 6. [C Program to Multiply to Matrix Using Multi-dimensional Arrays](https://www.programiz.com/c-programming/examples/matrix-multiplication). |
| 7. | 1. [C Program to Find Transpose of a Matrix](https://www.programiz.com/c-programming/examples/matrix-transpose). 2. [C Program to Multiply two Matrices by Passing Matrix to a Function](https://www.programiz.com/c-programming/examples/matrix-multiplication-function). 3. [C Program to Access Elements of an Array Using Pointer](https://www.programiz.com/c-programming/examples/access-array-pointer). 4. [C Program Swap Numbers in Cyclic Order Using Call by Reference](https://www.programiz.com/c-programming/examples/swapping-cyclic-order). 5. [C Program to Find Largest Number Using Dynamic Memory Allocation](https://www.programiz.com/c-programming/examples/dynamic-memory-allocation-largest). |
| 8. | **String:**   1. [C Program to Find the Frequency of Characters in a String](https://www.programiz.com/c-programming/examples/frequency-character). 2. [C Program to Count the Number of Vowels, Consonants and so on](https://www.programiz.com/c-programming/examples/vowel-consonant-frequency-string). 3. [C Program to Remove all Characters in a String Except Alphabet](https://www.programiz.com/c-programming/examples/remove-characters-string). 4. [C Program to Find the Length of a String](https://www.programiz.com/c-programming/examples/string-length). 5. [C Program to Concatenate Two Strings](https://www.programiz.com/c-programming/examples/concatenate-string). 6. [C Program to Copy String Without Using strcpy()](https://www.programiz.com/c-programming/examples/string-copy). 7. [C Program to Sort Elements in Lexicographical Order (Dictionary Order)](https://www.programiz.com/c-programming/examples/lexicographical-order). |
| 9. | **Structure and union:**   1. [C Program to Store Information of a Student Using Structure](https://www.programiz.com/c-programming/examples/structure-store-information). 2. [C Program to Add Two Distances (in inch-feet) System Using Structures](https://www.programiz.com/c-programming/examples/inch-feet-structure). 3. [C Program to Add Two Complex Numbers by Passing Structure to a Function](https://www.programiz.com/c-programming/examples/complex-number-add). 4. [C Program to Calculate Difference Between Two Time Periods](https://www.programiz.com/c-programming/examples/time-structure). 5. [C Program to Store Information Using Structures with Dynamically Memory Allocation](https://www.programiz.com/c-programming/examples/structure-dynamic-memory-allocation) |
| 10. | **File handling:**   1. [C Program to Write a Sentence to a File](https://www.programiz.com/c-programming/examples/write-file). 2. [C Program to Read a Line From a File and Display it](https://www.programiz.com/c-programming/examples/read-file). 3. [C Program to Display its own Source Code as Output](https://www.programiz.com/c-programming/examples/source-code-output). |

Concerned Faculty Signature and seal of Head of Department/Incharge