



“C Syllabus”

Introduction to C Programming

- What is computer programming
- Features of C and its Basic Structure
- Simple C programs, Constants
- Integer Constants, Real Constants, Character Constants, String Constants
- Backslash Character Constants
- Keywords in C
- Concept of an Integer and Variable
- Rules for naming Variables and assigning values to variables
- Hello World program using C

Operators and Expressions

- Arithmetic Operators
- Unary Operators
- Relational and Logical Operators
- The Conditional Operator
- Library Functions
- Bitwise Operators
- The Increment and Decrement Operators
- The Size of Operator



Data Types and Input/Output Operators

- Floating-point Numbers
- Converting Integers to Floating-point and vice-versa
- The type cast Operator
- The type char Keywords
- Character Input and Output
- Formatted input and output
- The gets() and puts() functions

Control Statements and Decision Making

- The goto statement
- The if statement
- The if-else statement
- Nesting of if statements
- The conditional expression
- The switch statement
- The while loop The do...while loop, The for loop
- The nesting of for loops
- The break statement and continue statement.

Arrays and Strings

- One Dimensional Arrays
- Multidimensional Arrays
- Strings



Pointers

- Basics of Pointers
- Pointers and One-dimensional Arrays
- Pointer Arithmetic
- Pointer Subtraction and Comparison
- Null pointers
- Pointers and Strings
- Pointers and two-dimensional arrays
- Arrays of Pointers

Structures and Unions:

- Basics of Structures
- Structures
- Unions

Functions

- Function Basics
- Function Prototypes
- Passing Parameters: Passing Parameter by value and Passing Parameter by reference
- Passing string to function
- Passing array to function
- Functions Recursion