

C Training Course Overview

Introduction to 'C' language

- Features of C
- History
- Structure of C Program
- Keyword, Identifiers & Constants

Data types

- Primitive Data Types
- Aggregated Data Types

Operators

- Binary Operators
- Unary Operators
- Ternary Operators
- Special Operators
- Order of Evaluation

Selections

- Simple if
- if..else
- Nested if
- if..else ladder
- Goto Statement
- Break and Continue Statement
- Switch..Case statement

Iteration

- While
- For
- Do..While
- Nested loop Statements

Arrays

- Introduction to arrays
- Need for Arrays
- Types of arrays
- One Dimensional Arrays
- Two Dimensional Arrays
- Multi Dimensional Arrays

String manipulation

- Declaring String
- Initializing String

- String Functions
- String Formatted Specifiers
- Multiple Strings

Functions

- Introduction to Functions
- Need for Functions
- Classification of Functions
- Function Prototype
- Defining Function
- Calling Function
- Function with Arrays
- Function with Strings
- Recursive Functions

Storage class specifiers

- Automatic
- Extern
- Static
- Register

Structures, unions, enum

- Introduction to structures
- Declaring a Structure
- Introduction to Structures
- Structures with Arrays
- Structures with Function
- Nested Structures
- Introduction to Union
- Declaring Union
- Difference between Structures and Unions
- Enumerations
- Typedef

Pointers

- Introduction to Memory
- Introduction to Pointers
- Operations on Pointers
- Pointer to Pointer
- Pointer to Array
- Array to Pointers
- Void pointers
- Call by Value and Call by Reference
- Passing Pointers to Functions
- Functions returning Pointers
- Pointer to Functions

- Dynamic Functions Call with Function Pointer
- Pointers with Structures

Dynamic memory allocation

- Allocation (Malloc, Calloc & Realloc)
- De – Allocation (Free)

Files

- Introduction
- File Input, Output Operations
- Sequential Files
- Random Access Files
- Command Line Arguments
- Handling Errors
- Database vs File System