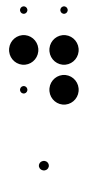


# Mastering C|C++

## Unleashing C/C++ Potential



- 3 Days Free Trail Session
- 90 Live Interactive lectures
- 250+ hands-on exercises



231, Veda Business Park, Above Tinkus  
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More Information

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## C PROGRAMMING

### Level - 1 | Fundamentals of Programming

- Introduction Of C Programming
- Data Type | Integer and Its Behavior
- Data Type | Character in C language
- Variables & Allocated | Unallocated Memory
- Data Type | Floating Point Values { Float & Double }
- Arithmetic Instruction Set | Operators
- Arithmetic Rules & Operators Precedence
- GCC Compiler Installation & Environment Setup
- First C program Deep Dive
- Dynamic User Input & User friendly Program
- Quiz : MCQ Assignment

### Level - 2 | Decision-making Statements

- Relational & Conditional Operator | Precedence
- Logical Operator & its Precedence
- Introduction of If-else
- Nested if-else Introduction
- Decision Tree Diagram to Solve Complex Conditional Problems
- Nested If Else | Complex Programs
- Quiz : MCQ Assignment

### Level - 3 | Looping Statements

- Increment & Decrement Operators & its Precedence
- Introduction of for Loop & its Flow of Execution
- iterative Problems & its Solution
- While Loop Vs Do-While Loop
- Break & Continue Statement
- Nested Loop introduction

- Star Pattern Programs
- Switch Statement

### Level - 4 | Pointers

- Introduction of Address & its Properties
- Address of (&) | Value at Address (\*) Operators
- Pointer Variable & Its Type Declaration
- Pointer Arithmetic
- Operation on Address
- Quiz : MCQ Assignment

### Level - 5 | Memory Allocation ( Static & Dynamic )

- Introduction of Stack & Heap Memory
- Static Memory Allocation & its Drawbacks
- Introduction of Dynamic Memory Allocation
- Way to Access Dynamically Allocated Memory Using Pointers
- Direct Memory Allocation Using Malloc & Free Function
- DMA Logical Problems & its Solution
- Quiz : MCQ Assignment

### Level - 6 | Array & Operation on Array

- Introduction of Array & its Behavior
- Array Address Calculation & Logical Reasoning
- Array Problem Solving Session
- Dynamic Allocated Array Using Malloc Function
- 2D | 3D ----- ND Array Concept

### Level - 7 | String

- Introduction of String & Basic Program
- Operation on String using String Handling Functions
- Dynamic String & 2D String
- Quiz : MCQ Assignment

## Level - 8 | Functions

- Introduction to Function & LIFO Architecture
- Function Declaration ,Definition & Calling
- Function Declaration FLOW With Example
- Local Variable - Global Variable - Block
- Argument passing
- Call by value address
- Passing array to function
- Introduction of recursion
- Binary recursion
- Quiz : MCQ Assignment

## Level - 9 | Input & Output Operation on File

- Introduction of File & EOF Char
- Fopen Function & Read Mode in file Operation
- Write Mode & Append Mode in File
- Complex Problems On File
- Quiz : MCQ Assignment

## Level - 10 | User Defined Datatype | Structure & Union

- Introduction of Object & its Property
- Create Your Own Data Type & Object Using Structure
- Static & Dynamic Object and Arrow (->) Operator
- Array of Static & Dynamic Object
- Quiz : MCQ Assignment

## C++ PROGRAMMING

## Level - 11 | Object Oriented Paradigms | C++ Programming

- What is Class & Object
- Create Dynamic Object Using new & delete Keywords
- Instance Variable Vs Class Variable
- intro of Data Encapsulation | Data hiding | Data Binding

- Access Specifier Public & Private
- Implementation of Encapsulation in C++
- Getter & Setter functions
- Class Function ( static function )

## Level - 12 | Object Oriented important Terms

- Reference Variable & Object Assignment
- This Pointer & instance Variable hiding
- Quiz : MCQ Assignment

## Level - 13 | Constructor & Destructor

- What is Constructor & its implementation
- Types of Constructor & Constructor Overloading
- Destructor
- Quiz : MCQ Assignment

## Level - 14 | Overloading & its Type

- What is Overloading and its type
- Function Overloading & its implementation
- Operator Overloading Introduction
- Unary & Binary Operator Overloading
- Quiz : MCQ Assignment

## Level - 15 | Inheritance

- Introduction of Inheritance & implementation
- Protected Access Specifier
- Function Overriding & Dynamic Binding
- Pure Virtual Function & Abstract Class
- Polymorphism
- Types of inheritance
- Friend Function
- Diamond Problem & Virtual Function
- Quiz : MCQ Assignment

## Level - 16 | Exception Handling

- What is Exception & it's Exception Handling
- Try & Catch in Exception handling
- Throws Keyword
- Quiz : MCQ Assignment

## Level - 17 | Standard Template library ( STL )

- Introduction of STL & its Component
- Container in STL
- STL Algorithms
- STL Iterators
- STL Functions
- Quiz : MCQ Assignment

## Level - 18 | Project Development

- Bank management system
- Scientific Calculator
- Hotel booking system
- Credit card validator