

C++ PROGRAMMING CPP

C++ INTRODUCTION

- Comments
- Typecasting
- Void Pointers
- The :: operator
- The Const Qualifier
- Reference variables

C++ FUNCTIONS

- Function Prototypes
- Function Overloading
- Default Arguments in Functions
- Call by value, address & reference
- Return by value, by address & By reference
- Inline Functions

CPP CLASS

- Member function
- Function Definition Outside The Class
- Classes and Constructors
- Destructors
- Copy Constructor
- The this Pointer
- New and delete Operators
- Using new and delete
- Malloc () / free () versus new/delete
- Classes, Objects and Memory
- Structures vs. Classes
- Static Class Data
- Static Member Functions
- Data Conversion
- Friend functions & friend Classes
- Data Conversion between Objects of Different Classes

C++ OPERATOR OVERLOADING

- Introduction
- Overloading assignment operator
- Overloading ++, --, +, -, *, /, <, > &
- logical operators
- Overloading operators between different objects
- Overloading << and >> (stream operators)

CPP INHERITANCE

- Constructors in Inheritance
- Private Inheritance
- Protected Inheritance
- Functions That Are Not inherited
- Virtual Function
- Pure virtual functions
- Virtual Functions in Derived Classes
- Virtual Functions and Constructors
- Destructors and virtual Destructors
- Virtual Base Classes
- Abstract class
- Abstract base class

C++ ADVANCED FEATURES

- Classes Within Classes
- Friend Functions
- Friend classes
- Overloading << and >>.

C++ IO

- Manipulators
- File I/O with Streams
- Opening and closing files
- Creating database with file Operation
- Binary I/O
- Elementary Database Management Interacting with
- Text files (ex: .txt, .c, .cpp)
- Non-text files (ex: .dat, .mpg, .avi, .mp3)
- Creating database with file operation