

c++programming

Basic of C++

1. Structure of a program
2. Variables. Data Types
3. Constants
4. Operators
5. Basic Input / Output
6. Control Structures
7. Functions (i)
8. Functions (ii)

Tokens, Expressions and Control Structures

1. Tokens, Keywords
2. Identifiers and Constants
3. Basic Data Types
4. User-Defined Data Types
5. Derived Data Types
6. Symbolic Constants
7. Operators, Scope Resolution Operator
8. Type Cast Operator
9. Implicit Conversions
10. Operator Overloading
11. Operator Precedence
12. Derived Data Types

Function

1. Function Prototyping
2. Call by Reference
3. Return by Reference
4. Inline Functions
5. Default Arguments
6. Const Arguments
7. Function Overloading

Classes and Objects

1. Defining Member Functions
2. C++ Program With Class
3. Making and Outside Functions Inline
4. Nesting of Member Functions
5. Private Member Functions
6. Arrays Within a Class
7. Static Data Members
8. Arrays Of Objects
9. Friendly Functions
10. Returning Objects

Constructors and Destructors

1. Constructors
2. Parameterized Constructors
3. Multiple Constructors in a Class
4. Constructors With Default Arguments
5. Dynamic Initialization of Objects
6. Copy Constructor
7. Destructors

Inheritance : Extending classes

1. Defining Derived Classes
2. Making a Private Member Inheritable
3. Single Inheritance
4. Multilevel Inheritance
5. Multiple Inheritance
6. Hierarchical Inheritance
7. Hybrid Inheritance
8. Abstract Classes
9. Virtual Base Classes

Pointers, Virtual Functions and Polymorphism

1. Pointers
2. Pointers to Objects
3. this Pointer
4. Pointers to Derived Classes
5. Virtual Functions

Mangaging Console I/O Operators

- 1.C++ Streams
- 2.C++ Stream Classes
- 3.Unformatted I/O Operations
- 4.Managing Output With Manipulations

Working with Files

- 1.Classes for File Stream Operations
- 2.Opening and Closing a File
- 3.Detecting end-of-file
- 4.More about Open(): File Modes

Exception Handling

- 1.Basics fo Exception Handling
- 2.Exception Handling Mechanism
- 3.Catching Mechanism