

Unary operator = -- ++ !

Binary Operator = + - / \*

Friend Function : If a function is defined as a friend function then, the private and protected data of a class can be accessed using the function.

Member Function: Function inside the class is known as member function or it is the member of that class

Constructor: Constructors are used to initialise the data members of a class.

Default Constructor: A default constructor is a constructor that accepts no parameters.

A default constructor is invoked whenever an object of the class is created.

Parametrized Constructor: A constructor that accepts parameters is called a parameterised constructor.

A parameterised constructor is invoked only when the object created specifies the arguments when it is declared.

Copy Constructor: Copy Constructor is a type of constructor which is used to

create a copy of an already existing object of a class type.

Destructor: It is preceded by a tilde (~). A destructor takes no arguments, and no return types

can be specified for it- not even void. It is called automatically by the compiler

whenever an object is destroyed. It cleans up the memory or the storage of

the object that is no longer accessible.

Static data Structures: Static data members are class members that are declared using the

static keyword.

There is only one copy of the static data member in the class, even if

there are many class objects.

This is because all the objects share the static data member.

Dynamic Data structures: The 'new' operator is used at the time of dynamic memory allocation

and object construction

The 'delete' operator is used at the time of object deletion to free up

memory space occupied by objects of a class which are no longer required

Friend Class: A friend class is a class that can access the private and protected members of a class in which it is declared as friend.

This pointer: 'this' pointer is used in a function or a constructor to refer to a data member of a class having the same name as a local variable of the function or constructor.

Static member function: By declaring a function member as static, you make it independent of any particular object of the class. A static member function can be called even if no objects of the class exist. A static member function can only access static data member.

Inline function: Compiler replaces the definition of inline functions at compile time instead of referring function definition at runtime.

Exception Handling: C++ exception handling is built upon three keywords: try, catch and throw. The process of converting system error messages into user friendly error message is known as Exception handling.

File Handling:  
ofstream: This data type represents the output file stream and is used to create file and to write information to files.  
ifstream: This data type represents the input file stream and is used to read info from files.  
fstream: This data type has capabilities of both ofstream and ifstream.

For opening a file open() function is used  
Modes to open a file :  
ios::app-Append mode  
ios::ate-Open a file for output and move the read/write control to the end of the file.  
ios::in-Open a file for reading  
ios::out-Open a file for writing  
ios::trunc-If the file already exists its contents will be truncated before opening the file  
close() function for closing a file

Template: C++ templates provide a way to re-use source code  
Class templates: it can support all data types.  
Function template: Use function templates to write generic functions that can be used

with arbitrary types. C++ Function templates are those functions which can handle different data types without separate code for each of them.

STL(Standard Template Library):Containers Algorithms Iterators

Map Associative Container: Maps are associative containers that store elements formed by a combination of a key value and a mapped value, following a specific order.