

Agenda-

Copy Ctor
Dynamic Memory Allocation
Shallow and Deep Copy
Static Data Members
Static Member Functions
Operator Overloading
Template

Tomorrows Agenda

Exception handling
Association
Inheritance
Diamond Problem
Virtual
Virtual function
Abstart class

Copy Ctor

Copy Ctor is a single parameterized Ctor
Default Copy Ctor does a shallow copy
`Complex(Complex &other)`

Static

1. datamember
static datamember needs to be initalized outside the class only.
This can be done by using scope resolution operator.
2. Member function
These are designed to access using classname::
Inside static member functions you cannot access non static members.

Template

If we want to write generic program in c++ we should use template

1. Function Template -> `template<typename T>`
2. Class Template -> `template<class T>`

T stands for type of parameter
You can use any name for it.

Opereator Overloading

1. Operators can be overloaded inside class or outside the class also.
2. Not all operators can be overloaded
3. Few operators cannot be overloaded outside the class they needs to be overloaded inside the class only.

Friend Function

If you want to access any private data member of a class outside a class in any non member function then declare that function as a friend of that class inside the class.