Agenda

- Revision
- Shallow copy and deep copy
- Copy constructor
- Friend function and class
- Operator overloading
- Conversion function

Shallow Copy (demo01 & demo02)

- When we try to copy one object into another object then by deafauly shallow copy is performed.
- shallow copy is bit by bit copy.
- It means the values of one object is copied as it is inside second object

Copy Constructor (demo03 to demo05)

- when you create a new object by copying an previously cretaed object then default copy ctor gets called.
- Default copy ctor does the shallow copy

Deep Copy (demo05)

- When one object is copied into another object by modifying some state of second object then we call it as deep copy.
- When your class consists of pointer type of data member and dynamic memory allocation is done, we need to perform deep copy while object copying.
- When you are creating an object of such class by copying the values from the previously cretaed object then in this case to perform deep copy you have to provide your own copy ctor.

Friend Function (demo06)

- It is a non member function of a class which is designed to access private members of the class.
- we have to declare the functions as friend inside the class.
- we can also define a friend function inside a class.
- the friend functions that are defined inside the class are directly called without using any object or class name.

Friend Class (demo07)

- If inside one class we want to access private members of the another class then make the class as friend of that class.
- to make friend of that class we must declare the class as friend inside the another class.

Operator Overloading (demo08 to demo12)

Conversion function(demo13 and demo14)