**Problem Statement:**

Implement a class called ComplexNum. The ComplexNum class will have two data members:

* int real; // The real part of complex number
* int imaginary; // Imaginary part of the complex number.

You have to implement default constructor, overloaded constructor, copy constructor, destructor, setters, getters, display function and overload the operators +, - , <<, >>, =, ==, !=

All the operators should be overloaded by both member and non-member function.

**Hint:**

The following listed examples are simply following mathematical notation

3+2i + 5+6i = 5+8i

3+2i - 5+6i = -2-4i

**Note:**

* Deallocate all dynamically allocated memory.
* Make separate complex.h, complex.cpp and main.cpp files.
* Follow all the code indentation, naming conventions and code commenting guidelines.