**ASSIGNMENT NO: 01**

**Problem Statement: Define a class Complex consisting following:**

Data members:

1. real
2. imaginary part

Member Functions:

1. One default constructor
2. Function setComplex () to set the value of real and imaginary part.
3. Function printComplex() to display

and

1. Four overloaded operator member functions

i. Operator+ to add two complex numbers.

ii. Operator \* to multiply two complex numbers.

iii. Overloaded << and >> to print and read Complex Numbers.

2. Friend function to add two complex number by taking two reference variables of class complex and returning another reference.

**Objectives:**

1. To learn to create classes in C++
2. To learn constructor , function and operator overloading in C++
3. To learn friend function in C++

**Theory:**

**Explain**

* + **Class**
  + **Operator Overloading**
  + **Friend Function**

# Algorithm / Class Diagram / Implementation:

# Platform: 64 –bit Open source Linux

**Input:** Any 2 complex numbers: (6+4i, 3+2i)

**Output:** addition (9+8i) and subtraction (3+2i) of 2 complex numbers

**Conclusion:** Hence, learned to create classes, friend function and performed operator overloading in C++ successfully.

**FAQs:**

1. What is inline function?
2. Which operator links class to a member?
3. What is default access specifier in C++?