**ASSIGNMENT NUMBER 2**

**STATEMENT**: Implement a class Complex which represents the Complex Number data type.Implement the following operations:

1. Constructor (including a default constructor which creates the complex number 0+0i).

2. Overloaded operator+ to add two complex numbers.

3. Overloaded operator\* to multiply two complex numbers.

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

**AIM**: To add and multiply two complex numbers using operator overloading and read and write through insertion and excretion operator.

**DESCRIPTION**: Create a class with name ‘Complex’ which consists of a constructor and a default constructor which creates the complex number. In this class, overload the respective operators to + to add to complex numbers, \* to multiply to complex numbers, read and print the complex numbers by << and >> operator respectively.

**OOP CONCEPT USED**:

1. **Default constructor**-:A default constructor is a constructor that either has no parameters, or if it has parameters, all the parameters have default values.
2. **Operator overloading**-:Operator overloading is a compile-time polymorphism in which the operator is overloaded to provide the special meaning to the user-defined data type. Operator overloading is used to overload or redefines most of the operators available in C++. It is used to perform the operation on the user-defined data type.

**3.CONCLUSION**: In this assignment, we learned and implemented the concept of operator overloading to add and multiply two complex numbers.We also learned the ifstream and ofstream operation used for insertion and excretion operators.