CSE225L – Data Structures and Algorithms Lab
Lab 03
Operator Overloading

Task : Recall the complex number class we discussed in our lectures. Modify the class and overload the –(subtraction)**, *** (multiplication) , **!=** (not equal) and the = =(equal) operators for the class given below.

complex.h

```
#ifndef COMPLEX_H_INCLUDED
#define COMPLEX_H_INCLUDED

class Complex
{
    public:
    Complex();
    Complex(double, double);
    Complex operator+(Complex);
    void Print();
    private:
    double Real, Imaginary;
};

#endif // COMPLEX_H_INCLUDED
```

complex.cpp

```
#include "complex.h"
#include <iostream>
using namespace std;

Complex::Complex()
{
    Real = 0;
    Imaginary = 0;
}
Complex::Complex(double r, double i)
{
    Real = r;
    Imaginary = i;
}
Complex Complex::operator+(Complex a)
{
    Complex t;
    t.Real = Real + a.Real;
    t.Imaginary = Imaginary + a.Imaginary;
    return t;
}
void Complex::Print()
{
    cout << Real << endl;
    cout << Imaginary << endl;
}
```