

Solution Code

```
/* C++ Program to Perform Complex Operations using Overloading */
#include <iostream>
using namespace std;
class Complex{
    private:
        double a;
        double b;

    public:
        Complex(double=1.0,double=1.0); // Constructor;
        void set(double,double);
        void print();
        Complex operator+(Complex);
        Complex operator++();
        Complex operator++(int);
};

    Complex::Complex(double r, double i){
        set(r,i);
    }

void Complex::print(){
    if (b<0)
        cout <<"\n" << a << "" << b <<"i" <<endl;
    else
        cout <<"\n" << a << "+" << b <<"i" <<endl;
}

void Complex::set(double r, double i){
    a = r;
    b = i;
}
```

Solution Code



```
Complex Complex::operator+(Complex R){           // Prefix Exm.
    Complex tmp;
    tmp.a = a + R.a;
    tmp.b = b + R.b;
    return tmp;
}
Complex Complex::operator++(){           // Prefix Exm.
    a++;
    b++;
    return *this;
}
Complex Complex::operator++(int x){           // Postfix Exm.
    a++;
    b++;
    return *this;
}
int main(){
    Complex A(3,4), B(5,-6);
        A.print();
        B.print();
        Complex C;
        C= A+B;
        C.print();
    ++A;
    cout <<endl;
    A.print();
    C = ++A;
    C.print();

    A++;
    A.print();
    //system("pause");
    return 0;
```